

Bill 25 (2019), CD2 Testimony

MISC. COM. 175



ELEMENTAL EXCELSIOR

Written Statement of Elemental Excelsior
before the Honolulu City Council
March 18, 2020

In Consideration of **Bill 25 CD 2 FD 1** Relating to the Adoption of the State Energy Conservation Code

Aloha Chair Anderson and Members of the Honolulu City Council:

Elemental Excelsior respectfully **submits support** for Bill 25 CD 2 FD 1, which regulates the design and construction of residential and commercial buildings for the effective use of energy through the adoption of the State Energy Conservation Code (2017), subject to local amendments by the City and County of Honolulu.

Elemental Excelsior is a Honolulu-based growth accelerator program founded and operating in Hawai'i. We have awarded over \$30 million to 99 companies resulting in over 50 demonstration projects in Hawai'i & Asia Pacific. Each year, we evaluate over 500 companies and look for innovative entrepreneurs from around the world to come to Hawai'i and find transformative solutions to help us achieve our 100% clean energy goals and solve our most pressing environmental problems. We select 15-20 companies annually that best fit our mission and fund each company up to \$1 million.

In April 2018, Elemental Excelsior commissioned a study entitled *Transcending Oil: Hawai'i's Path to a Clean Energy Economy*. The study found that in Hawai'i, transitioning to renewable energy is cheaper than sticking with oil. The faster we go, the cheaper it will be. As a policy recommendation, the study identified following through and enforcing current clean energy policies by fully funding and implementing building codes and standards. The report also found that *"Energy efficiency efforts increased over the past decade, led by Hawaii Energy's electric savings programs and a push to update building codes."*¹

We support Bill 25 CD 2 FD 1 for the following reasons:

1. **It is economically responsible:** According to a report by the National Institute of Building Sciences, for every \$1 invested in updating building codes, it yields an \$11 benefit. Updating building codes increase resiliency and mitigate potential costs that could come from natural disasters caused by climate change.²
2. **It opens up opportunities for innovation:** Updating our energy codes can address the rapid changes in technology that innovation has developed. In particular, the sections that provide guidance on grid interactive water heaters and electric vehicle

¹ Larsen, J., Mohan, S., Herndon, W., Marsters, P., & Pitt, H. (2018, May 01). *Transcending Oil: Hawai'i's Path to a Clean Energy Economy*, p.13 and 37, Retrieved from <https://rhg.com/research/transcending-oil-hawaiis-path-to-a-clean-energy-economy/>

² <https://www.nibs.org/news/432994/National-Institute-of-Building-Sciences-Issues-Interim-Report-on-the-Value-of-Mitigation-.htm>

charging infrastructure support the deployment of commercial ready clean energy innovation. About 20% of Elemental Excelerator's 99 portfolio companies, such as Hawai'i grown company Pono Home and Shifted Energy, focus on building efficiency, demonstrating an increased opportunity to attract innovation with forward-thinking policies such as Bill 25.

Mahalo for the opportunity to provide testimony.

Sincerely,


Dawn Lippert | Mar 13, 2020

Dawn Lippert
CEO

Speaker Registration/Testimony

Name Paul Bernstein
 Phone 8083737161
 Email paulbernstein2004@yahoo.com
 Meeting Date 03-18-2020
 Council/PH Committee Zoning
 Agenda Item CR-96
 Your position on the matter Support
 Representing Self
 Organization University of Hawaii
 Do you wish to speak at the hearing? No

March 12, 2020

Aloha Honolulu City Council Members,

I am testifying in strong support of Bill 25, specifically the Administration's FD1 version which was submitted by Councilmember Elefante. This bill helps to correct market failures related to energy costs by lowering the overall cost of providing energy for heating water and powering vehicles.

Written
Testimony

Economists have long recognized the principal-agent problem that constrains incentives for energy-efficiency investments by either landlords or tenants in renter-occupied properties and the need for energy efficiency standards and incentives for purchasing energy efficient technologies to overcome this market failure. That is, there are instances that regulators should invoke energy efficiency standards to effect a more efficient market outcome that improves the wellbeing of society. Bill 25 addresses this issue both in the area of EV charging infrastructure and water heating.

Regarding EV charging infrastructure, Council Member Elefante's FD1 strikes a fair balance between adding costs to new buildings and the need for Honolulu to reduce its greenhouse gas emissions. The Council Member and the Office of Climate Change, Sustainability and Resiliency (CCSR) are to be commended for going to great lengths to engage a wide array of stakeholders with differing views so as to arrive at this good compromise.

Regarding hot water heating, the Bill's requirement for the installation of solar hot water (SHW) heaters would result in savings of up to \$8,600 per household over the expected life of the equipment compared to a standard grid resistance water heater.

As Joseph Boivin, the former executive VP of the Gas Company, testified: "[Solar water heating] may be a little more expensive upfront as compared to installing a gas water heater, but after a few years the hot water is free. Despite the claims, the

economics do not in any way favor the ongoing use of gas energy over the sun.”

Thus a building with solar water heating will be less expensive in the long run, meaning lower total costs to homeowners and renters. In addition, much of the money spent for gas water heating flows out of the state to the providers of fuel (whether crude oil or LNG if were to ever be imported) and to the executives of the parent company of the Gas Company. This flow of funds contrasts to the paying local workers to install solar hot water systems.

Mahalo for the opportunity to submit testimony in support Bill 25 (2019). In order for the City to cost-effectively meet its emission reductions goals, I urge you to support Council Member Elefante’s version FD1 of the Bill.

Kind regards,
Paul Bernstein, PhD

Testimony
Attachment
Accept Terms
and Agreement ¹

IP: 192.168.200.67

From: CLK Council Info
Sent: Friday, March 13, 2020 6:34 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Dyson Chee
Phone 8084627570
Email cheedyson@gmail.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 FD1 Elefante
Your position on the matter Support
Representing Organization
Organization Hawaii Youth Climate Coalition
Do you wish to speak at the hearing? No

Aloha Chair Anderson, Vice-chair Kobayashi, and honorable Council Members,

My name is Dyson Chee and I am an 18 year old high schooler living in Ala Moana testifying in strong support of Bill 25 FD1 Elefante. I am also testifying on behalf of Hawaii Youth Climate Coalition, a youth-led, youth-founded organization that deals with our climate crisis.

Written
Testimony

It is imperative that we take solid action to tackle our climate crisis, and mandating that residential and commercial buildings have solar water heating and 25% EV readiness will be critical to reducing our addiction to fossil fuels. As a teen who will hopefully be moving out of my parents house in the not-so-distant future, it would be amazing to move into a home where the solar water heating is already provided, rather than me having to get rid of the gas heating and then switch to solar water heating. Yet, this dream does not look like it will come to fruition in time, despite state legislation that intended to make that dream a reality. We cannot choose convenience and immediate cost over the long-term well-being of the people and the planet. I urge you to pass Bill 25 FD1 Elefante, for the sake of the keiki of Hawaii.

Sincerely,
Dyson Chee

From: CLK Council Info
Sent: Friday, March 13, 2020 8:13 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Mio Chee
Phone	8082222940
Email	mioono@hotmail.com
Meeting Date	03-18-2020
Council/PH Committee	Council
Agenda Item	Bill 25 FD1 Elefante
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	I support Bill 25 FD 1 Elefante.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

From: CLK Council Info
Sent: Saturday, March 14, 2020 1:29 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Jude McCarthy
Phone	5622216401
Email	jude.mccarthy@icloud.com
Meeting Date	03-18-2020
Council/PH Committee	Council
Agenda Item	Bill 25 FD1 Elefante
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

From: CLK Council Info
Sent: Saturday, March 14, 2020 1:41 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Evan Derauf
Phone	8083983336
Email	ederauf@gmail.com
Meeting Date	03-16-2020
Council/PH Committee	Council
Agenda Item	coal
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	The world is coming to an end if we don't do something in a large force and this is one to make hawaii's air cleaner
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67



REGULAR MEETING
Honolulu City Council
March 18, 2020, 10:00 AM

TESTIMONY IN SUPPORT OF BILL 25 FD1 (Elefante)
Relating to the Adoption of the State Energy Conservation Code

Aloha Chair Anderson, Vice Chair Kobayashi, Members of the Honolulu City Council,

My name is Jun Shin. I am a Sophomore at the University of Hawai'i at Mānoa. I currently serve as the Environmental Justice Action Committee Chair for the Young Progressives Demanding Action (YPDA). YPDA advocates for public policies that reflect the values of young people throughout the State of Hawai'i. YPDA is in **support of Bill 25 CD2 (Elefante)**, Relating to the Adoption of the State Energy Conservation Code.

Experts continue to come out with reports such as the Fourth National Climate Assessment and the United Nations Intergovernmental Panel on Climate Change (IPCC) reports discussing the existential threat of climate change, the negative impacts it will have on our society, economy, and our natural resources, while highlighting the need for immediate action by our leaders.

There is a lot of work that needs to be done to effectively combat climate change, but Bill 25 is a great step in the right direction. Solar energy heating our water, building at least 25% of infrastructure needed for EV (Electrical Vehicle) readiness, and just making sure O'ahu's buildings are efficient as possible in how it uses energy is an important step in helping us to reach our goal of 100% renewable energy.

However as an organization whose membership and leadership consists of Millennials and younger, we know that meaningful progress is when both working people and the environment thrive hand in hand in a state where families live paycheck to paycheck and young people are moving away because they can't afford a decent standard of living. Bill 25 has the potential to help working families while protecting our environment. Being efficient with energy usage such as using solar instead of gas to heat water will help in reducing monthly electric bills, unloading at least some of the burden off of both those who own homes, as well as those who are renting their

homes. This is an issue of economic justice, as well as an environmental issue. For a livable and equitable Hawai'i future for all, it is important that this committee, and eventually the full City Council passes the strongest version of this measure.

Please protect Hawai'i's, and work to preserve it for the benefit of future generations. We look forward to continuing to work with the City to take proper action on climate change. Young Progressives Demanding Action respectfully asks for the committee to **support Bill 25 FD1 (Elefante)** and that you strengthen it further. Please lead the way for future climate resilient policies, and further incorporation of climate resilience into everyday decisions made by our leaders.

Thank you for the opportunity to testify,

Jun Shin,
Environmental Justice Action Committee Chair
Young Progressives Demanding Action (YPDA)
P.O. Box 11105
Honolulu, HI 96828
Cell: 808-255-6663
Email: junshinbusiness729@gmail.com
CC: action@ypdahawaii.org

From: CLK Council Info
Sent: Sunday, March 15, 2020 7:56 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Elle Cook
Phone	8886847
Email	kayakndive@yahoo.com
Meeting Date	03-18-2020
Council/PH Committee	Council
Agenda Item	Bill 25 FD1
Your position on the matter	Support
Representing Organization	Self
Do you wish to speak at the hearing?	No
Written Testimony	My name is Elle Cook, and reside in the Waikiki area. I support Bill 25 FD1 as an actionable step toward a clean energy future.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

From: CLK Council Info
Sent: Sunday, March 15, 2020 4:46 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Yuko Ishimura
Phone 8083983336
Email yukouilani@gmail.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 FD1 Elefante
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written Testimony Aloha,
I'm a mother of two young boys and stand in a strong support of Bill 25 FD1 Elefante which would help Hawaii become more energy-self-sufficient. On contrary to many places, we have abundant sunlight throughout the year and don't need to burn coal or oil to heat our water at all. Please consider this bill so our children could have even better place to live.

Testimony Attachment
Accept Terms and Agreement 1

IP: 192.168.200.67

From: CLK Council Info
Sent: Sunday, March 15, 2020 4:59 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Conner Higashino
Phone	8083541323
Email	conner.higashino@protonmail.com
Meeting Date	03-18-2020
Council/PH Committee	Council
Agenda Item	Bill 25
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67



Electrification
Coalition

March 16, 2020

The Honorable Ikaika Anderson, Chair & Presiding Officer,
Ann Kobayashi, Vice-Chair,
Carol Fukunaga, Floor Leader, and
Members of the Honolulu City Council

Re: Bill 25(2019) – SUPPORT

Dear Chair Anderson, Vice-Chair Kobayashi, Floor Leader Fukunaga, and Committee members:

The Electrification Coalition is pleased to offer this letter of support for the Bill 25 Energy Code Update to help accelerate electric vehicle adoption and for Hawaii to achieve its goal of transitioning all transportation to renewable fuels by 2035.

The Electrification Coalition (EC) is a nonpartisan, not-for profit group of business leaders committed to promoting policies and actions that facilitate the deployment of electric vehicles on a mass scale in order to combat economic, environmental, and national security dangers caused by our dependence on oil. Electric Vehicles plug into a grid that is domestic, diverse, and can insulate our business and consumers for the volatile nature of oil prices.

The Electrification Coalition has supported EV ready requirements around the country as an important policy that can help accelerate EV adoption. Making charging more convenient and accessible to consumers by requiring small investments at the time of construction will save developers and consumers money while building access to charging to power the future of transportation.

We strongly support this effort by Hawaii to put in place policies that provide the foundation for higher rates of EV growth in the state with passage of this ordinance relating to the adoption of the state energy conservation code. The EC also supports Councilmember Elefante's FD1 10% EV readiness requirement for affordable housing. Bill 25's provision for Level 2 infrastructure is written to assure flexibility for developers to build on a project basis with minimum standards. Overall, the proposal remains sensitive to developer concerns while also appropriately pushing forward in infrastructure build-out requirements and remaining focused on low income concerns. Bill 25 proposes reachable targets that are well designed and are crucial for pushing forward on transportation electrification targets. We urge your support of Bill 25.

Sincerely,

Benjamin Prochazka
Vice President - Electrification Coalition
303-717-3657
www.ElectrificationCoalition.org

From: CLK Council Info
Sent: Monday, March 16, 2020 7:35 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Alex Naumov
Phone 8084949300
Email alexcommon@gmail.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 (2019) CD2
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Honorable City Councilmembers,

Please pass a strong Bill 25 without further delay. It has a "first do no more harm" approach for our climate and island, requiring practical and cost-effective energy efficiency measures and "future proofing" of new island homes to take advantage of electric vehicles and solar panels.

Written
Testimony

I recently had to find a rental for my family with EV charging access, which I was unable to find in a reasonable time/cost. As an island, we need to improve EV charging if we are to expand access to EVs that are already cheaper to own and operate and increasingly powered by the sun. The most affordable time to do that is in new construction.

We face various crises right now, unfortunately, from longer-term affordability and climate crises to the most immediate and concerning public health crisis, and all require your bold leadership. Thank you for your leadership in passing this bill to address both our long-term affordability and climate challenges.

Testimony
Attachment

Accept Terms
and Agreement

1

From: CLK Council Info
Sent: Monday, March 16, 2020 9:43 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Susan Gorman-Chang
Phone 8187230767
Email sggc@dslextreme.com
Meeting Date 03-16-2020
Council/PH Council
Committee
Agenda Item CR-96
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written Testimony I support Bill 25. Although I would like to see more EV chargers installed by developers, this is at least a step in the right direction. Transportation is a large part of Hawaii's carbon footprint and we must do everything we can to make it easier for folks to be able to charge their electric vehicles, and to encourage more folks to purchase EV. It is imperative that we move forward on this now.

Testimony Attachment
Accept Terms and Agreement 1

IP: 192.168.200.67



Hawai'i Alliance for Community-Based Economic Development
1575 South Beretania Street, Suite 211 Honolulu, HI 96826
Ph. 808.550.2661
Email info@hacbed.org www.hacbed.org

Board Members

President

Jason Okuhama
Managing Partner,
Commercial & Business
Lending

Secretary

Marcus Kawatachi
Deputy Director,
Hawai'i Civil Rights Commission

Trina Orimoto

Clinical & Research
Psychologist

Miwa Tamanaha

Co-Director,
Kua'āina Ulu 'Auamo

HACBED Staff

Brent N. Kakesako

Executive Director

Keoki Noji

Chief Operating Officer

Merri Keli'ikuli

*Office Manager & Program
Support*

Sean Tangco

Program Specialist

**Testimony of Hawai'i Alliance for Community-Based Economic Development
Supporting Bill 25, Proposed CD2
Relating to Adoption of the State Energy Conservation Code**

Regular Meeting

Wednesday, March 18, 2020, 10:00am

Aloha Members of the Committee on Zoning, Planning, and Housing,

The Hawai'i Alliance for Community-Based Economic Development (HACBED) supports Bill 25, Proposed CD2, with comments, which would regulate the design and construction of residential and commercial buildings for the effective use of energy through the adoption of the State Energy Conservation Code.

HACBED was established in 1992 as a nonprofit statewide intermediary to address social, economic, and environmental justice concerns through community-based economic development and asset building strategies. It advances its mission with core competencies in the areas of community and organizational capacity building, community and economic development planning, and asset policy development and advocacy. HACBED supports energy conservation alongside housing affordability for the long-term sustainability of both our 'āina and the families who call this place home.

As such, HACBED supports the Bill 25, Proposed CD2, as it requires electric-vehicle parking in new developments and provides a 4-year delay of this requirement on nonprofit affordable housing developers building for low-income households that we comment should be up to 80% area medium income and thereafter, reducing said requirements. We would defer to the expertise of nonprofit development entities that might push for a larger implementation delay based on their experiences.

Mahalo for this opportunity to testify,

Brent N. Kakesako
Executive Director

From: CLK Council Info
Sent: Monday, March 16, 2020 10:44 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Jason Shon
Phone	8087539748
Email	jasontmjks@gmail.com
Meeting Date	03-18-2020
Council/PH Committee	Council
Agenda Item	Bill 25 FD1 Elefante
Your position on the matter	Support
Representing Organization	Self
Do you wish to speak at the hearing?	No
	I support Bill 25 and any effort to make our buildings and infrastructure more energy efficient and less dependent on fossil fuels.
Written Testimony	I recently purchased a used car. Although I would have preferred to purchase an EV or hybrid, I was forced to buy a gas car because the apartment where I live does not have EV charging stations and the opportunities to charge electric vehicles elsewhere are severely limited.
	Thank you for your consideration.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67



"Advancing the Commercial Property Management Industry through Education, Networking and Advocacy"

Testimony to the
Honolulu City Council
March 18, 2020

RE: Bill 25 Relating to Adoption of the State Energy Conservation Code

Aloha Council Chair Anderson, Vice Chair Kobayashi, and members of the Council:

We are testifying on behalf of the Building Owners and Managers Association of Hawaii, a trade organization focused on actively and responsibly representing the commercial real estate industry through the collection, analysis and communication of information and through professional development. BOMA Hawaii is a leader in promoting energy efficient buildings and strongly supports energy efficient alternatives transportation.

It has been estimated that more than 500,000 electric vehicles are now on the road in the United States, and this is only expected to grow. As plug-in cars have become more visible on the nation's highways and local streets, there has also been a corresponding need for electric vehicle charging stations. This emerging need is creating a marketplace demand. Many building owners have installed EV charging stations and have successfully used them as a profit center as well as an amenity to attract new business and/or new tenants. Others are reluctant to take on the cost (installation cost, lost revenue from lost parking spaces, etc.), ongoing maintenance and management responsibilities, and liability. Where building owners can balance the benefits and potential draw backs, and where it makes economic sense, we believe that property owners will move forward to meet the need, without federal, state or local mandates.

We have made efforts to work collaboratively with private sector stakeholders, governmental officials and the City Council concerning this measure and believe that significant progress has been made in crafting a forward-looking measure.

Thank you for the opportunity to comment on Bill 25.



HAWAII LABORERS-EMPLOYERS COOPERATION AND EDUCATION TRUST

650 Iwilei Road, Suite 285 · Honolulu, HI 96817 · Phone: 808-845-3238 · Fax: 808-845-8300

March 16, 2020

HONOLULU CITY COUNCIL

City Council Chamber

Honolulu, Hawaii 96813

DATE: Wednesday, March 18, 2020

TIME: 10:00 a.m.

TESTIMONY ON BILL NO. 25 (2019) CD2, Proposed FD1 – Relating to the Adoption of the State Energy Code

To Council Chair Anderson, Vice Chair Kobayashi and members of the Honolulu City Council:

Hawaii LECET is a labor-management partnership between the Hawaii Laborers' International Union of North America, Local 368, its' 5000+ members and its' 250+ unionized contractors. The Laborers' International Union of North America is the largest construction union in the United States.

Mahalo for the opportunity to testify. Hawaii LECET supports the intent of Bill No. 25 CD2, FD1 as proposed by Councilmember Elefante, as well as other versions of Bill 25 that include masonry and concrete wall updates in the building code. The sustainability and safety benefits of mass wall construction are recognized in the latest versions of the State Building Codes and including these changes will create codes that are tailored to Hawaii's unique climate, resulting in greater energy efficiency, fire safety and cost savings.

In addition, Hawaii LECET hopes the City Council will be able to address concerns about other proposals included in Bill 25 that would increase the cost of construction and affordable housing.

With respect,

Hawaii Laborers-Employers Cooperation & Education Trust

Speaker Registration/Testimony

Name Paul Bernstein
 Phone 8083737161
 Email paulbernstein2004@yahoo.com
 Meeting Date 03-18-2020
 Council/PH Committee Zoning
 Agenda Item CR-96
 Your position on the matter Support
 Representing Self
 Organization University of Hawaii
 Do you wish to speak at the hearing? No

March 12, 2020

Aloha Honolulu City Council Members,

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Written
Testimony

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Regarding EV charging infrastructure, Council Member Elefante's FD1 strikes a fair balance between adding costs to new buildings and the need for Honolulu to reduce its greenhouse gas emissions. The Council Member and the Office of Climate Change, Sustainability and Resiliency (CCSR) are to be commended for going to great lengths to engage a wide array of stakeholders with differing views so as to arrive at this good compromise.

Regarding hot water heating, the Bill's requirement for the installation of solar hot water (SHW) heaters would result in savings of up to \$8,600 per household over the expected life of the equipment compared to a standard grid resistance water heater.

As Joseph Boivin, the former executive VP of the Gas Company, testified: "[Solar water heating] may be a little more expensive upfront as compared to installing a gas water heater, but after a few years the hot water is free. Despite the claims, the

economics do not in any way favor the ongoing use of gas energy over the sun.”

Thus a building with solar water heating will be less expensive in the long run, meaning lower total costs to homeowners and renters. In addition, much of the money spent for gas water heating flows out of the state to the providers of fuel (whether crude oil or LNG if were to ever be imported) and to the executives of the parent company of the Gas Company. This flow of funds contrasts to the paying local workers to install solar hot water systems.

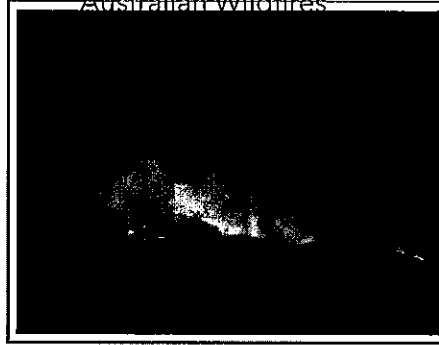
Mahalo for the opportunity to submit testimony in support Bill 25 (2019). In order for the City to cost-effectively meet its emission reductions goals, I urge you to support Council Member Elefante’s version FD1 of the Bill.

Kind regards,
Paul Bernstein, PhD

Testimony
Attachment
Accept Terms and Agreement ¹

IP: 192.168.200.67

Australian Wildfires



Support Bill 25!

Testimony for Bill 25

Honolulu City Council

Support for Bill 25 FD1, "Relating to the Adoption of the State Energy Conservation Code".

March 18, 2020, 10:00 AM hearing

I will not testify in person due to the ongoing covid-19 pandemic. Thank you for continuing to hear these urgently needed climate crisis fighting bills, even in the midst of the covid-19 crisis, for while the effects of covid-19 will be felt immediately and directly impacts many people, the climate crisis will affect everyone for generations.

We need to act quickly to reverse climate change, the sooner and stronger we act, the less problems we will face in the future. This is definitely an ounce of prevention versus a pound of cure. And we no longer have the luxury of finding solutions where every person and every business is guaranteed to benefit.

Simply put, To stop and reverse climate change we need to burn less things, and extract less fossil fuels from the ground.

Burning more natural gas instead of coal will not stop climate change.

<https://www.nationalgeographic.com/news/energy/2014/09/140924-natural-gas-impact-on-emissions/>

www.keeppoilintheground.com

There was a time when we hoped we could use natural gas temporarily while we found more clean energy sources. That time has passed, and we need to drastically reduce the burning of all fossil fuels, including natural gas. It has been shown that burning renewable biofuels **increases** the amount of greenhouse gases in the atmosphere.

<http://theconversation.com/biofuels-turn-out-to-be-a-climate-mistake-heres-why-64463>

Biofuels will not stop climate change. We urgently need solutions that do not involve burning stuff. Solar water heaters are a no brainer solution for Hawaii. I personally had a solar water heater put on my last house, and it paid for itself in reduced energy bills, in **less than a year**. (including the cost of installation and everything)

Bill 25 doesn't even reduce the amount of fossil fuels burned by Hawaii Gas. This bill just says, we don't want you to burn any more than you already are. If Hawaii Gas truly cared about the environment they would start investing in energy solutions that don't require burning things that pollute our atmosphere.

As far as the electric car charging station portion of the bill, I own an electric car and I have previously owned pets. I have had the experience of looking for a rental property that accepts pets, and also I have had the experience of looking for a rental property that has reliable access to vehicle charging. Neither one is easy.

I can tell you it is currently much harder to find a rental property that has reliable access to vehicle charging than a rental property that accepts pets. It is very difficult to own an electric car if you can't plug it in at home and this lack of available chargers is affecting people's decision to chose electric vs gas vehicles.

Thank you for your continued support of these urgently necessary environmental bills.

Sincerely,

Matthew Geyer.

Honolulu, HI 96822

keepoilintheground@gmail.com

www.keepoilintheground.com

<https://www.instagram.com/keepoilintheground/>

From: CLK Council Info
Sent: Tuesday, March 17, 2020 10:13 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Ian Tierney
Phone	8083970866
Email	ianptierney@gmail.com
Meeting Date	03-18-2020
Council/PH Committee	Council
Agenda Item	BILL 25 (2019) RELATING TO ADOPTION OF THE STATE ENERGY CONSERVATION CODE.
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	I support stricter codes and enforcement to meet the city and state sustainability goals.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

Honolulu City Council

Support for Bill 25, "Relating to the Adoption of the State Energy Conservation Code"

March 18 2020, 10:00 AM hearing

Aloha Members of the Council,

I am testifying in strong support of Bill 25, "Relating to the Adoption of the State Energy Conservation Code." I am specifically supporting the Administration's FD1 version which was submitted by Councilmember Elefante, although I would prefer a more stringent version of the Bill.

The bill includes important considerations that will help allow residents and workers to live and work comfortably. I think we would be foolish to think we could have a comfortable future without this bill and the efficiencies which will result. If we expect to afford a cool environment, hot water use, and private transportation then we need this bill.

I believe we must make it as easy as possible to use electric vehicles in order to reduce carbon dioxide emissions enough to meet the limits required by Hawaii Act 32 of 2017 (SB559 CD1). The requirements in this Honolulu bill to install the wiring during construction is a must to avoid extremely high cost of retrofitting after the initial construction.

I recommend more parking spaces be Electric Vehicle (EV) ready at level 2 standards than the Administrations proposed FD1, but this version of the bill is much more appropriate than CD2. I expect ownership of electric cars will skyrocket, if the potential owners can find stalls in which to charge them. Without providing enough future level 2 charging stalls, it will be impossible to meet the demand.

I recently had to buy a new car and I really wanted an electric car, but I decided against this because I did not know if I would continue living in a home that allowed me to charge it. Likewise, I know many people who have made this hard choice not to buy an electric car because they were stuck in condominiums that did not have available parking stalls with chargers.

The requirements in this bill will also ensure that water heating takes advantage of renewable energy.

I am very grateful that the Office of Climate Change, Sustainability and Resiliency (CCSR) went to great lengths to engage a wide array of stakeholders with differing views so as to help produce this bill. One of the many adjustments to this version of the bill resulted by yielding to affordable housing concerns. Considerations like this are important, but in the long-run affordable housing may become less affordable if residents of affordable housing cannot take advantage of electric cars.

The relatively inexpensive upfront investment during construction will minimize long-term energy costs for homeowners and renters alike, leading to lower overall costs to reduce greenhouse gas emissions.

As a member of the Citizens' Climate Lobby, I believe that Honolulu and the rest of the world cannot let climate change proceed unchecked. As such the United States needs to employ economic incentives to encourage households and businesses to reduce their emissions of greenhouse gases; I am especially hopeful the proposed Federal Energy Innovation and Carbon Dividend Act, which places a fee on emissions of carbon dioxide and refunds these fees to citizens, will become law. This act or a similar law

such as Hawaii Senate Bill 3150 will, for good reasons, increase the cost of using fossil fuels. Therefore, to help Honolulu homeowners and renters avoid these higher energy costs, we need to provide carbon-free or low carbon options with the lowest cost possible. The Administrations proposed FD1 will do just that by significantly lowering the costs of switching to electric vehicles and solar hot water heating.

Please help make it relatively easy for homeowners and renters to adjust by passing the Administrations proposed FD1, or better yet, a more stringent, not-less stringent version of the Bill. Measures in this Bill are necessary for Honolulu to realize a sustainable future in our changing world.

Thank you,

Charles E. Cox

Manoa

From: CLK Council Info
Sent: Tuesday, March 17, 2020 9:46 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Robert Binnie
Phone (808) 221-9294
Email xtcindna@google.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25
Your position on the matter Oppose
Representing Self
Organization
Do you wish to speak at the hearing? No

Written
Testimony

Aloha Chair Anderson and Council members.
I am a student in the University of Hawaii system. I am an Occupational Environmental Safety Management student. Your governing body has achieved excellent results recently with the plastics ban and other issues. I urge you to maintain your forward looking momentum by passing Bill 25. Solar powered water heaters will reduce carbon emissions and deadly Carbon Monoxide build-ups in single family structures due to old damaged gas fired water-heaters (cdc).
Additionally, many medium and low-income families would consider the purchase of an electric vehicle, if charging stations were available,
(https://afdc.energy.gov/files/u/publication/EV_Charger_Selection_Guide_2018-01-112.pdf).
This Bill will expand energy conservation by removing EVC as an exclusive wealthy persons decision, and make energy conservation equally available to non-wealthy families as well.
Thank you for your time and hard work,
Robert Binnie

Testimony
Attachment
Accept Terms
and ,1
Agreement

From: CLK Council Info
Sent: Tuesday, March 17, 2020 9:56 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name helen raine
Phone 8082946626
Email helenraine1@gmail.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 (2019), CD2, Proposed FD1
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written Testimony I urge the Council to pass Bill 25 with Councilmember Elefante's FD1 (Floor Draft #1). I fully Elefante's proposed change, which reinstates the 10% EV-readiness requirement for affordable housing. This is incredibly important. Climate change is already affecting our islands adversely.... let's plan for a better future by taking the impacts of climate change seriously. I trust you will do the right thing and help us to prepare for a warming planet.

Testimony Attachment

Accept Terms and Agreement 1

IP: 192.168.200.67

From: CLK Council Info
Sent: Tuesday, March 17, 2020 9:59 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Maria Welvaert
Phone	6085180412
Email	welvaert@hawaii.edu
Meeting Date	03-17-2020
Council/PH Committee	Council
Agenda Item	Bill 25 (2019), CD2, Proposed FD1
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	I support!
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

From: CLK Council Info
Sent: Tuesday, March 17, 2020 9:23 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Rhema Wong
Phone	8084997282
Email	rhemapeacewong@gmail.com
Meeting Date	03-18-2020
Council/PH Committee	Council
Agenda Item	Bill 25 FD1 Elefante
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

From: CLK Council Info
Sent: Tuesday, March 17, 2020 9:14 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Cheryl Reeser
Phone	808-214-0086
Email	joelypop@gmail.com
Meeting Date	03-18-2020
Council/PH Committee	Council
Agenda Item	Bill 25 (2019), CD2, Proposed FD1
Your position on the matter	Support
Representing Organization	Self
Do you wish to speak at the hearing?	No
	Aloha,
Written Testimony	As a neighbor island resident, I strongly support Bil 25 as Honolulu has the opportunity to set precedent through out the state.
	Mahalo, Cheryl Reeser
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67



Testimony in support of Bill 25 CD2 FD1 (Elefante)

COMMITTEE ON ZONING, PLANNING AND HOUSING

Hearing Wednesday, March 18, 2020

Aloha Council Chair Anderson and Members of the Honolulu City Council,

I am writing in strong support of Bill 25 CD 2 FD1.

Please include the important provisions in FD1 (Elefante) that would include 10% EV-readiness for affordable housing and strengthens the EV-readiness points-based path. Our residents who require affordable housing will be further disadvantaged if they do not have charging stations – something that will be essential in the transportation of the future.

These concrete measures will help us achieve the important goals our City and our State have committed to in order to slow and eventually reverse Climate Change. Though Bill 25 CD2 FD1, you will leave a legacy of weaning us from expensive, imported fossil fuels as well as reducing the living costs to our residents.

Mahalo,

Dr. Lisa Marten

Executive Director
Healthy Climate Communities
healthyclimate@hawaii.rr.com

From: CLK Council Info
Sent: Tuesday, March 17, 2020 8:37 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Allana Nicolas
Phone 8082941867
Email amcnico7@hawaii.edu
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 FD1
Your position on the matter Support
Representing Organization
Organization Surfrider Foundation UH Manoa Chapter
Do you wish to speak at the hearing? No

Written
Testimony

As an Electrical Engineering major at the University of Hawaii, it is my responsibility to use every bit of my knowledge to make my community and the world I live in just a bit better. The amount of carbon emissions that we produce is detrimental to our overall wellbeing. How could one look at their future children or grandchildren and simply say to them, "I chose to go with the option that was more detrimental to our planet and would directly impact you because I wanted to save a few dollars"? The future generations will forever remember us as the most selfish generation.

Testimony
Attachment

Accept Terms and Agreement 1

IP: 192.168.200.67



March 17, 2020,

Bill 25 (2019), CD2, FD1: Energy Code Update

Re: Hawaii City and County of Honolulu Bill 25 (2019), CD2, FD1: Introduction of EV Readiness
Dear Chair Anderson, Vice Chair Kobayashi, and members of the Council.

Thank you for your continued attention on Bill 25 (2019), CD2, FD1 and related support. Forth **strongly supports** the Bill 25 Energy Code Update to help Hawaii's journey towards 100% clean energy. Forth is a nonprofit partner to the City of Honolulu for the Bloomberg American Cities Climate Challenge with a mission to promote and support the advancement of electric mobility.

Bill 25 directly supports the Administration's commitment to transform all ground transportation to renewable fuels by 2035. It also resonates with the latest version of the International Energy Conservation Code (IECC); which is what the Hawaii's state energy code is based on. Access to convenient charging is a key factor in consumers' decisions to purchase an electric vehicle (EV), according to the International Energy Agency Global EV Outlook 2017. It is paramount to create a conducive environment for EV adoption by putting the EV charging infrastructure in place. Furthermore, the International Code Council (ICC) has just passed an amendment to its IECC to include requirements for 20% of EV-Ready infrastructure in Multi-Unit Dwellings and Commercial Buildings.

Bill 25 is a great example of prudent and thoughtful leadership on EV facilitation that takes equity, future-proofing, and best practices into consideration. The recognition of affordable housing's unique role in the housing stock through the reduced requirement is a direct example. In comparison to the 20% EV-Ready of the latest IECC, the 25% EV-Ready requirement of Bill 25 is a reasonable requirement with a flexible points system that entertains other technology options in addition to electrical infrastructure upgrades. It demonstrates the requirement is taking into account of both today's reality and the future trend of the island.

Forth's experience has been that addressing and planning for electric transportation early can lead to an acceleration in the implementation of electric vehicle charging infrastructure and EV ownership. Costs for such efforts, according to our partners in the building and trade sectors, can be de minimis and should not detract from the overall benefits from such action. Best practices such as these are being implemented around the country and stand out as one of the easiest ways to support a long-term transition to electric transportation.

If you have any questions about this engagement or Forth's role, please don't hesitate to reach out.

Best,

Zach Henkin

Deputy Director, Forth

503.803.3036

2035 NW Front Ave, Portland, OR 97209

forthmobility.org

From: CLK Council Info
Sent: Tuesday, March 17, 2020 6:44 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Susan Lord
Phone 8083965620
Email susanulord@earthlink.net
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 (2019), CD2, Proposed FD1
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written Testimony
Dear Council, My husband and I support this bill. We have owned a plug-in hybrid for nine months now. He was leery of EVs and so was I but the science proves it is better for the environment. My husband loves his Audi and fixes it himself which is why I wanted to go EV as the maintenance costs are about 30% lower.
After nine months, we LOVE driving EV and try to never drive hybrid. We are in sales and have driven many out-of-state salemen around in the last nine months, they all end their trip saying we need to consider purchasing an EV What really makes this easy is our office building has an EV charging station.
This saves us time as it is faster than using a wall outlet. I urge you to please help us switch to a more economical, smarter economy and open up opportunity to those less advantaged.
Thank you

Testimony Attachment
Accept Terms and Agreement 1

IP: 192.168.200.67

March 17, 2020

The Honorable Council Chair Anderson and Members
Honolulu City Council
530 South King Street
Honolulu, Hawai'i 96813

SUBJECT: Testimony Supporting Bill 25 (2020)

Dear Council Chair Anderson and Council Members:

On behalf of the Natural Resources Defense Council (NRDC) and NRDC Action Fund, which have over 3 million members and activists, nearly 7,500 of whom are residents of Honolulu, I am writing to urge you to support Bill 25 (2020), FD1, as amended by Councilmember Elefante, which updates Honolulu's outdated energy code for new construction.

Bill 25 has the potential to cut energy bills by up to 65 percent for Honolulu renters and homeowners, and will help put Hawai'i on the path to 100 percent clean energy. These efficiency updates will be more affordable over the long term for residents, make homes more efficient and healthier, and help reduce island-wide climate pollution so the City can meet its ambitious goals to help solve the climate crisis.

Bill 25 will also give O'ahu residents access to: energy-efficient new homes so residents save money on utility bills; more electric vehicle (EV) charging capacity at homes and businesses; more capacity for solar panels on the roofs of new homes; and more flexibility for builders to use super-efficient tropical building standards.

Energy Code Updates: Meeting Honolulu's Climate Goals, Helping Residents Save Money

Cities and counties across the country are on the front lines of both the impacts and solutions to the climate crisis. Building codes are a simple, powerful tool cities are now using to accelerate the transition to a clean energy economy and meet the emissions reductions goals set forth in the Paris climate agreement and adopted by Hawai'i and Honolulu. The proposed amendments up for adoption by the City Council will protect residents from being stuck with higher energy and maintenance costs year after year. They will also help homeowners easily install rooftop solar panels by requiring new homes to be "photovoltaic (PV)-ready," and support the growing adoption of electric vehicles. The proposed amendments will also create significant island-wide benefits in the form of new jobs and cleaner air.

Among the many benefits associated with the proposed code update, Bill 25 will: cut energy bills up to 65% going forward; help Honolulu achieve its climate goals; get O'ahu buildings EV-ready at a stage when it is 4-8 times cheaper (at new construction);

expand local clean energy jobs (Hawai'i already has four times more jobs in clean energy than in fossil fuels); reduce the need for imported oil; and improve indoor and outdoor air quality.

Energy Code Updates Save Residents Energy

Honolulu's current energy code has not been revised since 2006; it is 14 years out of date. Ongoing code updates help residents save energy and reduce energy costs and emissions. Bill 25 is critical to reduce long-term costs for residents, with more efficient buildings that reduce energy bills and give more people access to savings that come from solar energy and EVs. A six-year-old home constructed to the 2015 International Energy Conservation Code would use approximately 25% less energy than a house built under the current (2006) code.

Solar Photovoltaic Wiring is Cost Efficient and Environmentally Friendly

Solar readiness requirements would ensure new homes have the wiring to make it easy and affordable for homeowners to add solar panels, allowing residents to take full advantage of O'ahu's abundant sunshine. Hawaii has plenty of solar energy available at very low cost, and electric and natural gas prices are among the highest in the United States.¹ Increasing adoption of solar for all uses helps to reduce O'ahu's high use of imported oil, which has historically led to Hawai'i being the state with the highest U.S. retail power prices. This will help build local energy resilience and self-sufficiency. Solar panels will help reduce the 9% of O'ahu's carbon emissions that come from residential energy use and installing the basic wiring upfront is a critical element to meet the City's commitment of 100% renewable energy by 2045.²

EV-Readiness Accelerates Clean Transportation, Lowers Charging Costs, and Provides Greater Access

O'ahu has among the highest take-up rates of electric vehicles (EVs) across the United States, but existing building infrastructure does not support this growing use and demand. With the use of EVs expected to rise to over 22,000 by 2030, homes and businesses need to support the transition to clean electric vehicles. Acting later to retrofit O'ahu's parking spaces with charging stations would be far more costly than requiring EV readiness up front. Acting now is also far less expensive than failing to act to address climate change impacts, which O'ahu residents are already experiencing.

Multiple studies nationally have found that the avoided cost associated with requiring new -construction to be EV-ready ranges from \$2,000 to \$5,000 per parking space.³

¹ Energy Information Administration.

https://www.eia.gov/dnav/ng/ng_pri_sum_a_EPG0_PRS_DMcf_m.htm.

² Honolulu Annual Sustainability Report, 2019,

https://www.honolulu.gov/rep/site/ccsr/City_and_County_of_Honolulu_Annual_Sustainability_Report_2019.pdf.

³ <https://www.documents.dgs.ca.gov/bsc/2015TriCycle/CAC/Green/Exhibit-B-CARB-Cost-Analysis-and-Technical-Report.pdf>; <http://evchargingpros.com/wp-content/uploads/2017/04/City-of-SF-PEV-Infrastructure-Cost-Effectiveness-Report-2016.pdf>; <https://energy-solution.com/wp-content/uploads/2016/09/PEV-Infrastructure-Cost-Effectiveness-Summary-Report-2016-07-20b.pdf>.

Building in EV readiness avoids those costs. With proposed amendments to Bill 25 requiring EV-readiness, these avoided costs will total from \$1.4 million to \$3.4 million, and developers, homeowners, and renters will all benefit.

EV-readiness in new construction is an essential ingredient to support the City's commitment to transform all ground transportation to renewable fuels by 2045. On-road transportation accounts for 21% of O'ahu's polluting carbon emissions.⁴ EVs are expected to reach cost parity with gas-powered cars in the early 2020s—and today, used EVs are very affordable. Already, Honolulu has the 8th highest EV market share in the nation, and Hawai'i has the 2nd highest EV adoption rate per capita in the country.⁵ Honolulu must get its infrastructure ready to meet that demand.

Bill 25 is Affordable

Bill 25 will improve long-term housing affordability for Honolulu residents and tenants. While it would add about \$300 to \$2,700 dollars to the average cost of new construction—less than 1 percent of the median condo price, or half a percent of the median single-family home price—this initial investment will more than pay for itself over time through utility bill savings and, in the case of EVs, through avoided gasoline purchases.⁶ Assuming a 30-year mortgage, the average up-front cost would translate to approximately \$8/month, and utility bill savings are expected to be approximately \$53/month.⁷ **Overall, this totals a \$45/month savings.**

Plus, newly proposed parking reforms also under City Council consideration (Bill 2) will give developers even more flexibility to save money on parking construction costs for homes and EV readiness. Being able to build less parking will more than offset the relatively small costs associated with Bill 25; each parking space in Honolulu currently costs an average of \$25,000 to \$48,000 to build.⁸

Honolulu residents support Bill 25

Honolulu voters want action on climate change. Over 74 percent of O'ahu residents support building codes that include energy efficiency, solar hot water heating, and EV charging, even if they cost more up front but result in lower energy bills, according to a 2019 public opinion poll.⁹

⁴ Honolulu Sustainability Report, 2019, https://www.honolulu.gov/rep/site/ccsr/City_and_County_of_Honolulu_Annual_Sustainability_Report_2019.pdf.

⁵ <https://www.bizjournals.com/pacific/news/2018/11/16/honolulu-among-top-10-electric-vehicle-markets-in.html>

⁶ Up-front cost estimates: Department of Planning and Permitting, *Bill 25 (2019)*. Median home prices: Locations Hawaii, "Oahu Real Estate Report," December 2019. <https://www.locationshawaii.com/learn/market-reports/oahu-real-estate-report/>

⁷ This assumes 33% reduction on the average residential household electric bill; City estimates of savings are 33-65%. (see ref. 6)

⁸ Kathleen Rooney and Donald Shoup, "There's No Such Thing As Free Parking," *Honolulu Civil Beat*, December 9, 2019. <https://www.civilbeat.org/2019/12/theres-no-such-thing-as-free-parking/>

⁹ Nathan Eagle. "Poll: Oahu Voters Want Action On Climate Change," *Honolulu Civil Beat*. November 25, 2019. <https://www.civilbeat.org/2019/11/poll-oahu-voters-want-action-on-climate-change/>

To protect and promote the health, safety, resiliency, and economic prosperity of Honolulu and its residents, we urge you to support Bill 25 (2020).

Thank you for the opportunity to submit these comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Maria Stamas". The signature is fluid and cursive, with the first name "Maria" and the last name "Stamas" clearly distinguishable.

Maria Stamas, Esq.

Buildings Strategist, American Cities Climate Challenge

Natural Resources Defense Council / NRDC Action Fund

Dear Honolulu City Council,

I am writing in full support of Bill 25, CD2, Proposed FD1. This bill is an important and significant response to climate change and part of our necessary goal of creating a sustainable and renewable future for all. While we are making good progress in transitioning to renewable electricity production, we are lagging in the transportation area. Bill 25 helps address this in a significant way by requiring we build capacity to support electric vehicles (EVs). More importantly, we need to reduce our demand for energy. Improving energy efficiency is a long-standing approach to doing this. While these changes will increase up-front building costs, they will save money for residents in the long run.

I do not support all the concessions made to the building industry, especially the points-based electric vehicle readiness compliance path, which weakens EV readiness. FD1 does improve the EV-ready requirements in the bill. In item 20, it reinstates the 10% EV-readiness requirement for affordable housing, and it strengthens the EV-readiness points-based path.

Responding to climate change is absolutely essential for us to build a sustainable future for all. And Oahu citizens agree that this is a serious problem and are willing to make changes to respond. We are experiencing the effects of climate now, so people are aware of what these changes mean for their safety and quality of life. Responding in the right way not only supports changes people want to make, it saves them money, as well. Bill 25 does this.

Finally, these changes do not require unreasonable actions on the part of developers. These are not untested or unproven technologies or changes. We need to build for the future, and this bill helps us build for a better future for all. I urge you to support Bill 25, CD2, FD1..

From: CLK Council Info
Sent: Tuesday, March 17, 2020 4:55 AM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Nanea Lo
Phone 8084543504
Email naneaclo@gmail.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 (2019), CD2, Proposed FD1
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Hello,

My name is Nanea and I am writing in strong support of Bill 25 (2019), CD2, FD1.

I do not support the numerous concessions made to the building industry throughout this long process, especially the points-based electric vehicle readiness compliance path, which sidesteps the EV readiness Oahu really needs. And I am saddened to see the Council ignore the many and varied opportunities a major building code revision offers to combat the Climate Crisis.

Written
Testimony

But FD1 brings a welcome improvement to the EV-ready requirements in the bill.

Bill 25 has been before the Council and ZPH Committee for nine contentious months. No stakeholder is happy with the entire bill, but it is a major step forward from the current City energy code that will fight the Climate Crisis and save many people a good deal of money.

FD1 makes two valuable concessions, albeit minor, to the overwhelming majority of stakeholders who are concerned about the Climate Crisis instead of short-term profit. In item 20, it reinstates the 10% EV-readiness requirement for affordable housing (100% Area Median Income or below), and it improves some values in the EV-readiness points-based compliance table.

A November poll showed that 82% of Oahu voters consider climate change to be a “very

serious” problem or “somewhat serious,” and are willing to act to combat it, both individually and collectively. According to the poll, of those surveyed [1],

- * 81% favor updating building codes to require new homes to have solar water heaters, and to be read to charge electric vehicles. If that means added upfront costs to home builders while lowering utility bills to the homeowner in the long run, 74% still supported doing so.

- * 50% would be likely to change their car to a hybrid or electric vehicle; two-thirds said they’d be likely to install solar hot water or a rooftop photovoltaic system.

- * The pollster said Oahu residents do not blame other places for climate change, and believe it can be solved. “They were basically like, ‘tell me what to do, I’m ready to go,’” she said. And she said the poll clearly showed that Oahu residents are not expecting climate change effects--they are experiencing them right now.

The Natural Resources Defense Council estimates that Bill 25's energy efficiency requirements will cost developers only an additional \$750 to \$3,200, less than 0.5% of a new home price. With \$50 monthly savings on energy bills, homeowners and renters will recoup all of that quickly and save a great deal more in the following years [2].

Bill 25 began over a year ago as a compromise among stakeholders. Each time it has come up in a hearing, its proposed amendments have favored the building groups more and more and more.

- * EV-ready requirements for retail establishments were lowered from 25% of parking stalls to 20%.

- * EV-ready requirements for housing built for families earning over 100% and up to 140% Area Median Income (AMI) were also lowered from 25% of parking stalls to 20%.

- * New housing built for families earning 100% AMI or less have been completely exempted from EV-ready parking stalls.

- * 32-amp wiring in the EV-ready specifications for townhomes with enclosed attached garages has changed to 16-amp, doubling charging times for many EV owners.

- * A point system for EV-readiness was added, allowing fewer charging stations.

In contrast, environmental groups have received two small concessions:

- * New roofs must be “solar-ready,” meaning adding a few yards of conduit and wiring.

- * The requirement for Level 1 EV charging in residential and multi-unit buildings was changed to Level 2. This necessity was so obvious to all stakeholders that it barely counts as a concession.

Every month brings a new record un-natural catastrophe: hurricanes, heat waves, rain bombs, floods, wildfires, droughts. On February 16, a "bomb cyclone" caused 100-foot waves. In Britain. Are these horrors less important than the profit of a few construction companies? Someday soon, Honolulu will be slammed by a devastating hurricane, and the importance of action will be undeniable. But it will be too late to have helped avoid it.

Please pass Bill 25 (2019), CD2, FD1 today. Then write some serious legislation that takes real, concrete action that will make a major difference in avoiding climate breakdown.

Government officials all over the world, at every level, think, “Well, we can’t fix climate

change by ourselves.” And sure enough, every government official all over the world, at every level, is not fixing climate change. But someone needs to pitch in. Hawaii needs to pitch in.

[1] <https://www.civilbeat.org/2019/11/poll-oahu-voters-want-action-on-climate-change/>

[2] <https://www.staradvertiser.com/2020/02/17/editorial/island-voices/column-bill-25-provisions-would-be-affordable-for-builders-and-buyers/>

Testimony

Attachment

Accept Terms
and Agreement 1

IP: 192.168.200.67

From: CLK Council Info
Sent: Monday, March 16, 2020 9:48 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Caroline Kunitake
Phone 8087822150
Email caroline.m.kunitake@gmail.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 (2019), CD2, Proposed FD1
Your position on the matter Support
Representing Self
Organization <https://350hawaii.org/>
Do you wish to speak at the hearing? No

Dear City Council.

Please pass Bill 25 with Council Member Elefante's FD1 (Floor Draft #1). FD1 would reinstate the 10% EV-readiness requirement for affordable housing (100% Area Median Income or below) that was taken out at the last ZPH Committee hearing, and strengthen some values in the EV-readiness points-based compliance path.

Written Testimony While opponents of the bill have argued it will make construction prohibitively expensive, the Natural Resources Defense Council estimates that developers will actually spend from \$750 to at most \$3,200 more to include energy efficiency. That's less than half a percent of a new home price — and with 50% monthly energy savings on bills, it doesn't take long for homeowners and renters to recoup all that and more. [2].
[2] <https://www.staradvertiser.com/2020/02/17/editorial/island-voices/column-bill-25-provisions-would-be-affordable-for-builders-and-buyers/>

Thank you for your time and attention to this matter.

Mahalo,
Caroline Kunitake

Testimony
Attachment
Accept Terms
and Agreement 1

From: CLK Council Info
Sent: Monday, March 16, 2020 8:30 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Sherry Pollack
Phone 8082398276
Email davidsher@juno.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 (2019), CD2, Proposed FD1
Your position on the matter Comment
Representing Self
Organization
Do you wish to speak at the hearing? No

Written Testimony
In the face of the climate crisis we are in, it is unconscionable that so many concessions were made to the building industry, especially the points-based electric vehicle readiness compliance path, which weakens EV readiness. This goes against the will of the people, as the majority of Oahu voters consider climate change to be a very serious problem and are willing to act to combat it. In addition, half of those polled favored updating building codes to require new homes to be more energy efficient, use solar water heaters and be able to charge electric vehicles.

Thankfully, the proposed FD1 does improve EC-ready requirements currently in the bill.

I urge the full Council to pass Bill 25 with Councilmember Elefante's proposed FD1.

Testimony Attachment

Accept Terms and Agreement 1

IP: 192.168.200.67

From: CLK Council Info
Sent: Monday, March 16, 2020 8:18 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Climate Protector
Phone 808 294-3689
Email Tbohl8@yahoo.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 (2019), CD2, FD1 Proposed (Elefante)
Your position on the matter Support
Representing Organization
Organization Climate Protectors Coalition
Do you wish to speak at the hearing? No

Aloha Chair and Council members:

The Climate Protectors Coalition strongly supports the CD2 Proposed FD1 (Elefante) version of Bill 25! The other drafts of Bill 25 are too watered down to be supported.

The Climate Protectors Coalition is a new group inspired by the Mauna Kea Protectors but focused on reversing the climate crisis. As a tropical island State, Hawaii will be among the first places harmed by the global climate crisis, with more intense storms, loss of protective coral reefs, and rising sea levels. This crisis is an existential threat to Hawai'i! We must do all we can to reduce our carbon footprint and become at least carbon neutral as soon as possible.

Written
Testimony

The Proposed FD1 version of Bill 25 recognizes that one important way for Oahu to address the climate crisis is to shift to solar electric water heaters and electric motor vehicles from those powered by fossil fuels—natural gas and gasoline or diesel—that produce far more greenhouse gases. This Bill 25 CD2 FD1 Proposed reasonably strengthens the bill, reinstating the 10% EV-readiness requirement for affordable housing (100% Area Median Income or below) that was taken out at the last ZPH Committee hearing, and strengthens some values in the EV-readiness points-based compliance path. It requires residential and commercial buildings to install solar hot water heating and have 25% ready access for electric vehicles. These are needed steps to help Hawaii achieve its clean renewable goals and become carbon neutral as soon as possible. Some argue that this would raise already-high housing costs. But, the temporary short term increases are not major and will be more than offset by long term savings within a few

years, leaving consumers better able to afford costs for years to come. This proposal is clearly cost beneficial overall! It can only be portrayed as raising costs if you fail to consider long term cost savings and benefits, and ignore the overwhelming external costs of the climate crisis—more severe storms, sea level rise, and death of the coral reefs that protect our beaches and shorelines, including billions of dollars of shorefront homes and infrastructure.

This Bill 25 CD2 Proposed FD1 is the most prudent approach for Oahu, our keiki and our future. Please pass this CD2 FD1 version of Bill 25. Mahalo!

Testimony

Attachment

Accept Terms and
Agreement 1

IP: 192.168.200.67

From: CLK Council Info
Sent: Monday, March 16, 2020 7:56 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name John Grandinetti
Phone 808 737 3536
Email grandsolar808@gmail.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item bill 25 (2019)
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No
Written Testimony
Testimony Attachment
Accept Terms and Agreement 1

IP: 192.168.200.67

From:
Sent:
Subject:

CLK Council Info
Monday, March 16, 2020 7:08 PM
Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Linda K. K. Y. Schatz
Phone 8084288717
Email lindaschatz@schatzcollaborative.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25
Your position on the matter Comment
Representing Organization
Organization Schatz Collaborative LLC
Do you wish to speak at the hearing? No

Aloha Council Members,

As a developer working to build workforce rental housing, I support components of this bill and object to the exemption on only 100%AMI units and below. Instead of peppering you with facts, which we have tried to do over the last few months, you have instead chosen to listen to misleading information from supporters of this bill - I am choosing to write about my disappointment of your actions.

Written
Testimony

First off with the good news, I support the proposed point system in the bill which provides flexible options for each project to determine how they will meet their EV requirements. The points system is fair and focuses on the amount of cars that can be charged according to levels and installation. The more cars that can be charged within a given period the more points you earn. It provides incentives for developers to do more.

I am disappointed and strongly object to the exemption of the EV system to only 100%AMI. There have been proponents that have said that anything above 100% AMI is market. The problem is that our housing market is very difficult to build in and it makes building units up to 140%AMI almost impossible financially to pencil. Just because something is considered "market" does not mean it's financial feasible to construct. That is why you rarely see multi-family rentals developed in Hawaii. On the mainland, the U.S. develops about 300,000 units of multi-family rentals. In Hawaii, we hardly develop this type of product at all. In the last three years we have developed no new projects of scale in this asset class. It's a fallacy to call something "market" and assume it's feasible. That's how expensive our housing market

is - and policy makers like you are only making it harder to develop by putting policies like this in place.

Lastly, I'd like to call out the social inequities of this Bill 25. It assumes that every person will want an EV car. This benefits the limousine liberals who can afford to buy an EV. I've talked to my prospective tenants, working class, local people with generations in Hawaii... to survey them and they find it preposterous that you would side over EV requirements vs. focusing on the affordability of housing. One of the major goals of the Office of Climate Change is housing affordability. They surveyed stakeholders on Oahu and found that people do not feel our community is resilient due to their lack of housing choices and supply. This is one step further in pushing their current fear and anxiety on not being able to afford housing in Hawaii, especially when most of the families I serve are paycheck to paycheck and spend 45% or more of their income on housing.

This policy is a feel good bill for those who feel helpless in the overall scheme of climate change...and instead of focusing efforts on a community wide push to encourage mass transit options, biking, or congestion pricing - you have decided to tax housing again. Developers are the easiest targets to get a feel good bill out and say you've done something. But what you have honestly done is make it that much harder to make workforce rental housing feasible. In a time like this where the world is dealing with COVID-19, you have decided to limit opportunities for housing for our essential workers that need it the most - those who earn 80-140%AMI. The nurses, health professionals, fire fighters, police, EMS professionals, etc...we need them to respond to this pandemic. And we all know we do not have enough of them working now, there's a shortage, because housing affordability in Honolulu County is impossible due to decades of historical policies like this and the continual taxation of housing.

Sincerely disappointed,
Linda Schatz
Managing Member, Principal
Schatz Collaborative LLC

Testimony
Attachment

Accept Terms
and Agreement

1

IP: 192.168.200.67

From: CLK Council Info
Sent: Monday, March 16, 2020 6:53 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name	Ronald H. Yasuda
Phone	808428009903
Email	iamretiredmc@gmail.com
Meeting Date	03-18-2020
Council/PH Committee	Council
Agenda Item	Bill 25 (2019),CD2, Proposed FD!
Your position on the matter	Support
Representing	Self
Organization	
Do you wish to speak at the hearing?	No
Written Testimony	Let's use alternative energy and get away from the dependency on fossil fuel.
Testimony Attachment	
Accept Terms and Agreement	1

IP: 192.168.200.67

From: CLK Council Info
Sent: Monday, March 16, 2020 7:00 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Tlaloc Tokuda
Phone 8083250486
Email tlalocctt@hotmail.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 (2019), CD2, Proposed FD1
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

To: The Honolulu City Council
From: Tlaloc Tokuda
Date: Wednesday, March 18, 2020

In strong support of Bill 25 (2019), CD2, FD1

350Hawaii.org writes in strong support of Bill 25 (2019), CD2, FD1.

Written
Testimony

I do not support the numerous concessions made to the building industry throughout this long process, especially the points-based electric vehicle readiness compliance path, which sidesteps the EV readiness Oahu really needs. And I am saddened to see the Council ignore the many and varied opportunities a major building code revision offers to combat the Climate Crisis.

But FD1 brings a welcome improvement to the EV-ready requirements in the bill. Bill 25 has been before the Council and ZPH Committee for nine contentious months. No stakeholder is happy with the entire bill, but it is a major step forward from the current City energy code that will fight the Climate Crisis and save many people a good deal of money. FD1 makes two valuable concessions, albeit minor, to the overwhelming majority of stakeholders who are concerned about the Climate Crisis instead of short-term profit. In item 20, it reinstates the 10% EV-readiness requirement for affordable housing (100% Area Median Income or below), and it improves some values in the EV-readiness points-based compliance table.

A November poll showed that 82% of Oahu voters consider climate change to be a “very

serious” problem or “somewhat serious,” and are willing to act to combat it, both individually and collectively. According to the poll, of those surveyed [1],

- * 81% favor updating building codes to require new homes to have solar water heaters, and to be read to charge electric vehicles. If that means added upfront costs to home builders while lowering utility bills to the homeowner in the long run, 74% still supported doing so.

- * 50% would be likely to change their car to a hybrid or electric vehicle; two-thirds said they’d be likely to install solar hot water or a rooftop photovoltaic system.

- * The pollster said Oahu residents do not blame other places for climate change, and believe it can be solved. “They were basically like, ‘tell me what to do, I’m ready to go,’” she said. And she said the poll clearly showed that Oahu residents are not expecting climate change effects--they are experiencing them right now.

The Natural Resources Defense Council estimates that Bill 25's energy efficiency requirements will cost developers only an additional \$750 to \$3,200, less than 0.5% of a new home price. With \$50 monthly savings on energy bills, homeowners and renters will recoup all of that quickly and save a great deal more in the following years [2].

Bill 25 began over a year ago as a compromise among stakeholders. Each time it has come up in a hearing, its proposed amendments have favored the building groups more and more and more.

- * EV-ready requirements for retail establishments were lowered from 25% of parking stalls to 20%.

- * EV-ready requirements for housing built for families earning over 100% and up to 140% Area Median Income (AMI) were also lowered from 25% of parking stalls to 20%.

- * New housing built for families earning 100% AMI or less have been completely exempted from EV-ready parking stalls.

- * 32-amp wiring in the EV-ready specifications for townhomes with enclosed attached garages has changed to 16-amp, doubling charging times for many EV owners.

- * A point system for EV-readiness was added, allowing fewer charging stations.

In contrast, environmental groups have received two small concessions:

- * New roofs must be “solar-ready,” meaning adding a few yards of conduit and wiring.

- * The requirement for Level 1 EV charging in residential and multi-unit buildings was changed to Level 2. This necessity was so obvious to all stakeholders that it barely counts as a concession.

Every month brings a new record un-natural catastrophe: hurricanes, heat waves, rain bombs, floods, wildfires, droughts. On February 16, a "bomb cyclone" caused 100-foot waves. In Britain. Are these horrors less important than the profit of a few construction companies? Someday soon, Honolulu will be slammed by a devastating hurricane, and the importance of action will be undeniable. But it will be too late to have helped avoid it.

Please pass Bill 25 (2019), CD2, FD1 today. Then write some serious legislation that takes real, concrete action that will make a major difference in avoiding climate breakdown.

Government officials all over the world, at every level, think, “Well, we can’t fix climate change by ourselves.” And sure enough, every government official all over the world, at every level, is not fixing climate change. But someone needs to pitch in. Hawaii needs to pitch in.

[1] <https://www.civilbeat.org/2019/11/poll-oahu-voters-want-action-on-climate-change/>

[2] <https://www.staradvertiser.com/2020/02/17/editorial/island-voices/column-bill-25-provisions-would-be-affordable-for-builders-and-buyers/>

Mahalo for your consideration

Tlaloc Tokuda
73-4599 Kukuki St,
Kailua Kona, HI 96740

Testimony
Attachment

Accept Terms
and Agreement 1

IP: 192.168.200.67

In Support of Bill 25 CD2 (2019)

February 24, 2020

Dear Committee Chair Menor, Vice Chair Waters and ZPH Committee Members,

I strongly support Bill 25 as proposed by Councilmember Elefante (Bill 25 (2019), CD2, Proposed FD1).

The urgency of passing Bill 25 this year cannot be overstated:

The problem: Climate scientists continue to warn us that intensive actions to reduce greenhouse gases in our atmosphere are needed NOW if we are to hold the global temperature rise below 3 degrees Centigrade—literally a point of no return from Earth as we know it. (See [Climate Change—The Facts in 4 Minutes](#) ; click the picture that appears.)

A partial solution: Bill 25 as written will make two substantive changes in the lives of Hawaii's citizens:

- 1) How we heat water: use of solar or other renewable energy source as opposed to gas
- 2) How we get around the island: use electric vehicles (EVs), not fossil fuel-driven vehicles

It is up to you, our leaders, to understand the crisis we are in, and make these new options available to as many of Hawaii's citizens as possible. Bill 25 is not a total solution but a critical first step. It will encourage people to take small, incremental steps in their own lives that can make a significant difference when adopted worldwide.

The benefits: Long-term economic benefits will accrue to Hawaii's citizens from the passage of Bill 25:

- 1) Water heating: After the initial cost for solar panels is paid off (3-5 yrs), the home owner will never again receive a gas or electric bill for heating water. [Regarding being able to choose a water heating method, most homeowners don't get a choice anyway--the home builders do.]
- 2) EV-ready infrastructure: When the infrastructure for an EV charger is installed in new constructions, the cost savings is considerable. For example, the infrastructure for a Level 2 charger could cost \$2500 or less at the time of construction (cf. \$10,000 if retrofitted). Additionally, having EV-ready parking stalls is already becoming a huge selling point for multi-dwelling units (condos and apartments).
- 3) Electric vehicle ownership/leasing: Purchase costs continue to drop; driving range continues to increase (over 150 miles per charge in most cars; many models average 250 miles per charge as of 2020); EVs require no gas, no oil, no transmission fluid, no water; maintenance costs are substantially lower than for fossil fuel cars (our own EV, a 2011 Nissan Leaf, has, in 8 years and 73,000 miles driven, so far needed: yearly battery and multipoint checks; brake flush and brake lube; a second set of tires and tire rotations; occasional windshield wiper replacements; replacement of one auxiliary battery (not under warranty) and one replacement main battery after four years (free under warranty). That's it!

These benefits do not include the environmental benefits (reduced global warming; less air, water and ground pollution; fewer health problems due to less pollution) as we replace gas-powered cars with EVs worldwide.

Retraining: Obviously, people employed in the fossil fuel industries (coal, oil, gas) will be negatively affected by the elimination of fossil fuels and will need retraining in clean energy jobs. Government as well as private companies will need to play large roles in this transition (there is a State bill, HB1934, in the legislature this session supporting such partnerships). This is not socialism, this is people helping people and people helping the planet. [Think of the U.S. government's role in WWII where women were quickly trained to make weapons of war.] All levels of government and businesses—including gas and fossil fuel companies in Hawaii—should play active roles in this transition. They, along with the State Legislature and City Council, must acknowledge that coal, oil and gas-based industries are harming the planet, that the shift to clean energy sources must be made, and that providing appropriate assistance to workers as needed is essential.

Think Big: Some amendments to Bill 25 are required due to our heightened climate emergency:

- Require that 100% (not 25%) of new multi-dwelling home and commercial parking stalls be made EV-ready. Vancouver, Canada, now requires 100% of stalls be EV-ready.
- Require Level 2 (not Level 1) chargers be installed (municipalities adopting similar laws now mandate Level 2 chargers due to their efficiency). Level 1 is of no real use to later model EVs (charge time is way too long).
- State clearly in Hawaii's Energy Code that fossil fuel energy sources are no longer an option; if choices are to be made, only clean, renewable energy options are acceptable

We can all sense that Bill 25 is the right thing to do. Spend the money now for big payoffs in the future. Help Hawaii lead in the race to save our planet and our people. The next generation is counting on you. Thank you.

Jan Pappas — Aiea, Hawaii

From:
Sent:
Subject:

CLK Council Info
Monday, March 16, 2020 6:15 PM
Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Zoe Malia Ozoa Loos
Phone 8087545304
Email zoemalia13@gmail.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 (2019), CD2, Proposed FD1
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

In strong support of Bill 25 (2019), CD2, FD1

350Hawaii.org writes in strong support of Bill 25 (2019), CD2, FD1.

I do not support the numerous concessions made to the building industry throughout this long process, especially the points-based electric vehicle readiness compliance path, which sidesteps the EV readiness Oahu really needs. And I am saddened to see the Council ignore the many and varied opportunities a major building code revision offers to combat the Climate Crisis.

Written
Testimony But FD1 brings a welcome improvement to the EV-ready requirements in the bill. Bill 25 has been before the Council and ZPH Committee for nine contentious months. No stakeholder is happy with the entire bill, but it is a major step forward from the current City energy code that will fight the Climate Crisis and save many people a good deal of money. FD1 makes two valuable concessions, albeit minor, to the overwhelming majority of stakeholders who are concerned about the Climate Crisis instead of short-term profit. In item 20, it reinstates the 10% EV-readiness requirement for affordable housing (100% Area Median Income or below), and it improves some values in the EV-readiness points-based compliance table.

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* 81% favor updating building codes to require new homes to have solar water heaters, and to be read to charge electric vehicles. If that means added upfront costs to home builders while

lowering utility bills to the homeowner in the long run, 74% still supported doing so.

- * 50% would be likely to change their car to a hybrid or electric vehicle; two-thirds said they'd be likely to install solar hot water or a rooftop photovoltaic system.

- * The pollster said Oahu residents do not blame other places for climate change, and believe it can be solved. "They were basically like, 'tell me what to do, I'm ready to go,'" she said. And she said the poll clearly showed that Oahu residents are not expecting climate change effects--they are experiencing them right now.

The Natural Resources Defense Council estimates that Bill 25's energy efficiency requirements will cost developers only an additional \$750 to \$3,200, less than 0.5% of a new home price. With \$50 monthly savings on energy bills, homeowners and renters will recoup all of that quickly and save a great deal more in the following years [2].

Bill 25 began over a year ago as a compromise among stakeholders. Each time it has come up in a hearing, its proposed amendments have favored the building groups more and more and more.

- * EV-ready requirements for retail establishments were lowered from 25% of parking stalls to 20%.

- * EV-ready requirements for housing built for families earning over 100% and up to 140% Area Median Income (AMI) were also lowered from 25% of parking stalls to 20%.

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- * A point system for EV-readiness was added, allowing fewer charging stations.

In contrast, environmental groups have received two small concessions:

- * New roofs must be "solar-ready," meaning adding a few yards of conduit and wiring.

- * The requirement for Level 1 EV charging in residential and multi-unit buildings was changed to Level 2. This necessity was so obvious to all stakeholders that it barely counts as a concession.

Every month brings a new record un-natural catastrophe: hurricanes, heat waves, rain bombs, floods, wildfires, droughts. On February 16, a "bomb cyclone" caused 100-foot waves. In Britain. Are these horrors less important than the profit of a few construction companies? Someday soon, Honolulu will be slammed by a devastating hurricane, and the importance of action will be undeniable. But it will be too late to have helped avoid it.

Please pass Bill 25 (2019), CD2, FD1 today. Then write some serious legislation that takes real, concrete action that will make a major difference in avoiding climate breakdown. Government officials all over the world, at every level, think, "Well, we can't fix climate change by ourselves." And sure enough, every government official all over the world, at every level, is not fixing climate change. But someone needs to pitch in. Hawaii needs to pitch in.

[1] <https://www.civilbeat.org/2019/11/poll-oahu-voters-want-action-on-climate-change/>

[2] <https://www.staradvertiser.com/2020/02/17/editorial/island-voices/column-bill-25-provisions-would-be-affordable-for-builders-and-buyers/>

Testimony
Attachment

Accept Terms
and Agreement 1

From: CLK Council Info
Sent: Monday, March 16, 2020 5:49 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Diane Higham
Phone 8087761387
Email Dhigham@hawaiiantel.net
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 (2019), CD2, Proposed FD1
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written Testimony I live on Hawaii Island so may not have a vote on this bill, but we on the outer islands do care. What happens on each island affects us all. Every year our hurricanes and natural disasters occur more often and cause greater damage. Passing this bill would be a great step towards working to mitigate climate change. It would also show that we are serious about making these changes and could really help to boost morale in these trying times. Thank you for listening. We appreciate all the work that you do for our islands.

Testimony Attachment

Accept Terms and Agreement 1

IP: 192.168.200.67



Email: communications@ulupono.com

HONOLULU CITY COUNCIL REGULAR MEETING
Wednesday, March 18, 2020 — 10:00 a.m. — City Council Chamber

Ulupono Initiative strongly supports Bill 25 (2019) CD 2 Proposed FD 1, Relating to the Adoption of the State Energy Conservation Code.

Dear Chair Anderson and Members of the Council:

My name is Amy Hennessey, and I am the Senior Vice President of Communications & External Affairs of Ulupono Initiative. We are a Hawai'i-based impact investment firm that strives to improve our community's quality of life by working toward solutions that create more locally produced food; increase affordable clean, renewable energy and transportation options; and better manage freshwater and waste resources.

Ulupono strongly supports Bill 25 (2019) CD 2 Proposed FD 1 – which updates the City's Building Energy Conservation Code to help make our residential and commercial buildings more energy-efficient. It supports energy-efficient new homes, strengthens the solar water heating requirements, expands access to electric vehicle (EV) charging capacity, ensures solar power access for new homes, and promotes the use of super-efficient tropical building standards. Updates to the City's Building Energy Conservation Code can help achieve 33-65 percent more annual energy reductions in home buildings compared to current code requirements.

Of particular note, EVs are a critical part of our climate and transportation energy future:

- EVs provide immediate greenhouse gas (GHG) emissions reductions. EVs produce zero emissions at the tailpipe, and even when full lifecycle emissions (from manufacturing through disposal) are considered, EV emissions are approximately 50 percent lower than internal combustion engine vehicles. Here in Hawai'i, they become cleaner every year.
- EVs can alleviate Hawai'i's high cost of living. In one study, rural drivers in Hawai'i saved \$417 per year by switching from gasoline to electricity.
- EVs are prime for market acceleration from public support. We have more EVs per capita than any other state, except California, but declining availability of charging infrastructure. In 2015, there were 8 EVs for every public charging station in Hawai'i and, in 2018, there were 13 EVs per charger.

Requiring qualifying facilities to be "EV-ready" is smart future-proofing. Recently, the International Code Council (ICC) voted to update its building standards to include EV-ready provisos. The rationale was that the cost of retrofits is significantly more expensive than when installed upfront and such an upfront investment is a relatively small part of the total building cost. The ICC approval only validates the County's proposal and market need for EV-ready policies.

Investing in a Sustainable Hawai'i

999 Bishop Street, Suite 1202 | Honolulu, Hawai'i 96813 ☎ 808.544.8960 📠 808.432.9695 | www.ulupono.com

More importantly, EVs can lower the overall cost of living. A recent case study in San Francisco estimated the costs of EV-readiness at the time of construction to be less than \$1,000 per parking spot. Even if the costs were \$2,000 per spot, these additions would only increase the price of a condo by 0.5-0.7 percent. This equates to an increase in a typical 20 percent down payment by \$400 and a monthly mortgage (or related rent) by less than \$10 per month. In addition, EV drivers stand to save \$35 or more per month by driving electric. This policy enables residents to lower their overall cost of living rather than pricing Hawai'i families out of such benefits since the costs to retrofit can be exorbitantly expensive.

Given the current consideration of Bill 2, which would eliminate the minimum parking requirements altogether, we believe that such market flexibility combined with Bill 25 can more than substantiate cause to maintain the full EV-ready requirement for affordable housing. A structured parking space costs more than \$45,000 to build, so eliminating unneeded parking can have a material impact on developing new housing and more than make up for the relatively small cost of EV-readiness.

Given that, we still have concerns around the EV-readiness proposal, specifically:

- 1) the aggregation of points across multiple projects and phases, and
- 2) the elimination of any EV-readiness for area median incomes (AMIs) of 100% or less

This structure can easily create the unintended consequence of disproportionately allocating EV-readiness to higher-end, luxury projects, versus moderate or affordable housing. While we respect the sensitivity to increasing housing costs, we believe EV-readiness has minimal impact on a home's monthly budget and, more importantly, allows those households to actually reduce their overall cost of living. Rather than helping the less affluent access more affordable transportation options, this may only continue to make it convenient to those of means.

That being said, though we would naturally prefer adjustments, we do recognize and appreciate the efforts made by OCCSR, the Councilmembers and other key stakeholders to progress the bill to this point. Therefore, although we raise concerns for consideration, we also fully support the CD 2 Proposed FD 1.

As our energy issues become more complex and challenging, we appreciate the Council's efforts to look at policies that support clean ground transportation.

Amy Hennessey, APR
Senior Vice President, Communications & External Affairs

From: CLK Council Info
Sent: Monday, March 16, 2020 5:39 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Harald Ebeling
Phone 808 9881605
Email haraldebeling@gmail.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 (2019), CD2, Proposed FD1
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

I am writing to voice my strong support for Bill 25 (2019), CD2, FD1.

Although the bill falls woefully short of taking the bold steps toward a sustainable future for the islands that we desperately need, its at least halfhearted move toward EV readiness is worth supporting.

Written Testimony Please take this first step - and then immediately work hard to make the meaningful changes to Hawaii's laws, regulations, ordinances, and the building code that will wean us from fossil fuels. Stand up to lobbyists; what they are telling you amounts to claiming that the profits of the building industry are more important than the future of our keiki.

Mahalo!

Harald Ebeling

Testimony Attachment

Accept Terms and Agreement 1

From: CLK Council Info
Sent: Monday, March 16, 2020 5:38 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name David Leake
Phone 8082474737
Email dwleake@aol.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 (2019), CD2, Proposed FD1
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

IN STRONG SUPPORT OF:
Bill 25 (2019), CD2, FD1

I do not support the numerous concessions made to the building industry throughout this long process, especially the points-based electric vehicle readiness compliance path, which sidesteps the EV readiness Oahu really needs. And I am saddened to see the Council ignore the many and varied opportunities a major building code revision offers to combat the Climate Crisis.

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- * EV-ready requirements for retail establishments were lowered from 25% of parking stalls to 20%.

- * EV-ready requirements for housing built for families earning over 100% and up to 140% Area Median Income (AMI) were also lowered from 25% of parking stalls to 20%.

- * New housing built for families earning 100% AMI or less have been completely exempted from EV-ready parking stalls.

- * 32-amp wiring in the EV-ready specifications for townhomes with enclosed attached garages has changed to 16-amp, doubling charging times for many EV owners.

- * A point system for EV-readiness was added, allowing fewer charging stations.

In contrast, environmental groups have received two small concessions:

- * New roofs must be "solar-ready," meaning adding a few yards of conduit and wiring.

- * The requirement for Level 1 EV charging in residential and multi-unit buildings was changed to Level 2. This necessity was so obvious to all stakeholders that it barely counts as a concession.

Every month brings a new record un-natural catastrophe: hurricanes, heat waves, rain bombs, floods, wildfires, droughts. On February 16, a "bomb cyclone" caused 100-foot waves. In Britain. Are these horrors less important than the profit of a few construction companies? Someday soon, Honolulu will be slammed by a devastating hurricane, and the importance of action will be undeniable. But it will be too late to have helped avoid it.

Please pass Bill 25 (2019), CD2, FD1 today. Then write some serious legislation that takes real, concrete action that will make a major difference in avoiding climate breakdown.

Government officials all over the world, at every level, think, "Well, we can't fix climate change by ourselves." And sure enough, every government official all over the world, at every

level, is not fixing climate change. But someone needs to pitch in. Hawaii needs to pitch in.

[1] <https://www.civilbeat.org/2019/11/poll-oahu-voters-want-action-on-climate-change/>

[2] <https://www.staradvertiser.com/2020/02/17/editorial/island-voices/column-bill-25-provisions-would-be-affordable-for-builders-and-buyers/>

Testimony

Attachment

Accept Terms
and Agreement 1

IP: 192.168.200.67

From: CLK Council Info
Sent: Monday, March 16, 2020 5:26 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Daniela Escontrela
Phone 9548734646
Email daniescontrela@gmail.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 (2019), CD2, Proposed FD1
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

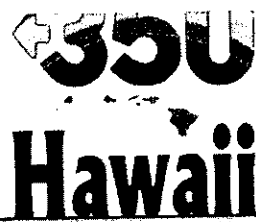
I do not support the numerous concessions made to the building industry throughout this long process, especially the points-based electric vehicle readiness compliance path, which sidesteps the EV readiness Oahu really needs. And I am saddened to see the Council ignore the many and varied opportunities a major building code revision offers to combat the Climate Crisis.

But FD1 brings a welcome improvement to the EV-ready requirements in the bill.

Written Testimony Bill 25 has been before the Council and ZPH Committee for nine contentious months. No stakeholder is happy with the entire bill, but it is a major step forward from the current City energy code that will fight the Climate Crisis and save many people a good deal of money.

FD1 makes two valuable concessions, albeit minor, to the overwhelming majority of stakeholders who are concerned about the Climate Crisis instead of short-term profit. In item 20, it reinstates the 10% EV-readiness requirement for affordable housing (100% Area Median Income or below), and it improves some values in the EV-readiness points-based compliance table.

Testimony
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183 Pinana St., Kailua, HI 96734 • 808-262-1285 • info@350Hawaii.org

To: The Honolulu City Council
From: Brodie Lockard, Founder, 350Hawaii.org
Date: Wednesday, March 18, 2020

In strong support of Bill 25 (2019), CD2, FD1

Dear Chair Anderson, and Councilmembers,

350Hawaii.org writes in strong support of Bill 25 (2019), CD2, FD1.

We do not support the numerous concessions made to the building industry throughout this long process, especially the points-based electric vehicle readiness compliance path, which sidesteps the EV readiness Oahu really needs. And we are saddened to see the Council ignore the many and varied opportunities a major building code revision offers to combat the Climate Crisis.

But FD1 brings a welcome improvement to the EV-ready requirements in the bill.

Bill 25 has been before the Council and ZPH Committee for nine contentious months. No stakeholder is happy with the entire bill, but it is a major step forward from the current City energy code that will fight the Climate Crisis and save many people a good deal of money.

FD1 makes two valuable concessions, albeit minor, to the overwhelming majority of stakeholders who are concerned about the Climate Crisis instead of short-term profit. In item 20, it reinstates the 10% EV-readiness requirement for affordable housing (100% Area Median Income or below), and it improves some values in the EV-readiness points-based compliance table.

A November poll showed that 82% of Oahu voters consider climate change to be a “very serious” problem or “somewhat serious,” and are willing to act to combat it, both individually and collectively. According to the poll, of those surveyed [1],

* 81% favor updating building codes to require new homes to have solar water heaters, and to be read to charge electric vehicles. If that means added upfront costs to home builders while lowering utility bills to the homeowner in the long run, 74% still supported doing so.

* 50% would be likely to change their car to a hybrid or electric vehicle; two-thirds said they'd be likely to install solar hot water or a rooftop photovoltaic system.

* The pollster said Oahu residents do not blame other places for climate change, and believe it can be solved. “They were basically like, ‘tell me what to do, I’m ready to go,’” she said. And she said the poll clearly showed that Oahu residents are not expecting climate change effects—they are experiencing them right now.

The Natural Resources Defense Council estimates that Bill 25's energy efficiency requirements

will cost developers only an additional \$750 to \$3,200, less than 0.5% of a new home price. With \$50 monthly savings on energy bills, homeowners and renters will recoup all of that quickly and save a great deal more in the following years [2].

Bill 25 began over a year ago as a compromise among stakeholders. Each time it has come up in a hearing, its proposed amendments have favored the building groups more and more and more.

- * EV-ready requirements for retail establishments were lowered from 25% of parking stalls to 20%.
- * EV-ready requirements for housing built for families earning over 100% and up to 140% Area Median Income (AMI) were also lowered from 25% of parking stalls to 20%.
- * New housing built for families earning 100% AMI or less have been completely exempted from EV-ready parking stalls.
- * 32-amp wiring in the EV-ready specifications for townhomes with enclosed attached garages has changed to 16-amp, doubling charging times for many EV owners.
- * A point system for EV-readiness was added, allowing fewer charging stations.

In contrast, environmental groups have received two small concessions:

- * New roofs must be "solar-ready," meaning adding a few yards of conduit and wiring.
- * The requirement for Level 1 EV charging in residential and multi-unit buildings was changed to Level 2. This necessity was so obvious to all stakeholders that it barely counts as a concession.

Every month brings a new record un-natural catastrophe: hurricanes, heat waves, rain bombs, floods, wildfires, droughts. On February 16, a "bomb cyclone" caused 100-foot waves. In Britain. Are these horrors less important than the profit of a few construction companies? Someday soon, Honolulu will be slammed by a devastating hurricane, and the importance of action will be undeniable. But it will be too late to have helped avoid it.

Please pass Bill 25 (2019), CD2, FD1 today. Then write some serious legislation that takes real, concrete action that will make a major difference in avoiding climate breakdown.

Government officials all over the world, at every level, think, "Well, **we** can't fix climate change by ourselves." And sure enough, every government official all over the world, at every level, is not fixing climate change. But someone needs to pitch in. **Hawaii** needs to pitch in.

Brodie Lockard
Founder, 350Hawaii.org

[1] <https://www.civilbeat.org/2019/11/poll-oahu-voters-want-action-on-climate-change/>

[2] <https://www.staradvertiser.com/2020/02/17/editorial/island-voices/column-bill-25-provisions-would-be-affordable-for-builders-and-buyers/>

From: CLK Council Info
Sent: Monday, March 16, 2020 4:00 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Amanda Ellis
Phone 808-476-4504
Email Ellisa@eastwestcenter.org
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written
Testimony

I am writing to urge Council to do the right thing for the majority of citizens with the long term in mind. This bill is critically important so please reconsider the recent changes. The slight increase in new construction costs – about 1% of the median condo price, or half a percent of a median single family home price – more than pays for itself through utility bill savings, and in the case of EV-readiness, through avoided gasoline purchases. The cost of new construction today is far lower than the cost of retrofitting buildings later; EV-readiness alone is four to eight times cheaper at the time of construction than it is as a retrofit. Thank you.

Testimony
Attachment

Accept Terms and Agreement ¹

IP: 192.168.200.67

From: CLK Council Info
Sent: Monday, March 16, 2020 2:15 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Wendy Arbeit
Phone 8085401402
Email arbeit@hawaiiantel.net
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written Testimony I support the intent of Bill 25 BUT not in its revised form. I suggest you return to the original by taking out the EV Parking Points System-- it is complicated, hard to enforce, and will result in less EV-ready stalls.
I also suggest increasing the percentage of ev-ready parking stalls for affordable housing (110% AMI and below) from 10% to 25% as originally intended in the bill.
Please, it is more important that you respond to the needs of your constituents and climate change, rather than the pockets of developers.

Testimony
Attachment
Accept Terms and Agreement 1

IP: 192.168.200.67



Hawai'i Energy

1132 Bishop Street, Suite 1800 • Honolulu, Hawai'i 96813 • HawaiiEnergy.com • P: (808) 839-8880 • F: (808) 441-6068

Council of the City and County of Honolulu
City Hall, 530 South King Street
Honolulu, Hawai'i 96813

Honolulu City Council
Testimony in Support of Bill 25 (2019) FD1 - Relating to the Adoption of the State Energy Conservation Code
March 18, 2020, 10:00 AM Hearing

Dear Chair Anderson, Vice Chair Kobayashi, Floor Leader Fukunaga and Members of the Council:

Thank you for the opportunity to submit comments on Bill 25, Relating to the Adoption of the State Energy Conservation Code. The Hawai'i Energy program would like to testify in **strong support** for this item and the proposed FD1.

Hawai'i Energy works on behalf of the Hawai'i Public Utilities Commission (PUC) to empower island families and businesses to make smart energy choices to reduce energy consumption, save money, and pursue a clean energy future. We believe the new energy codes are critical in this effort and part of a global movement to make progress on climate change mitigation through codes and standards.

Energy efficiency remains the cheapest, cleanest energy resource today. The amended IECC 2015 will provide healthy and safe indoor environments while providing substantial bill savings for occupants over the life of the building, promote greater energy resilience, and help Hawai'i reach our statewide commitment to reach 100% clean energy by 2045. In general, any building code is designed and reviewed for efficiency with cost-effectiveness in mind. Moreover, the Hawai'i amendments were carefully developed with the input of many agencies, organizations and the design and construction industry to minimize unintended consequences such as increased construction, materials and labor costs – while assuring occupants the benefits of high performance buildings that consume less electricity.

Electric vehicle charging infrastructure requirements

According to global research consulting firms McKinsey & Company and the Bloomberg New Economy Forum, electric vehicles (EV) are expected to reach cost parity with internal combustion engine (ICE) vehicles in the early 2020s. Consumer adoption of EVs will be swift and Hawai'i must be poised to meet this demand. Policymakers have an important role in supporting market transformation in this area.

Therefore, Hawai'i Energy supports the proposed FD1 with the EV-readiness requirement for at least 10 percent of newly added parking stalls at affordable housing units offered for sale or rent to household earning 100 percent or below of the area median income (AMI). We recognize the sizable cost advantage, **between four to eight times less expensive**, of having EV-ready capacity at the time of construction.

In fact, Hawai'i Energy, with funding support from Ulupono Initiative, has even committed to providing a bonus rebate to those affordable housing developments (up to 100 percent AMI), which is now available while funding lasts. When paired with our existing EV charging station rebate, the two incentives can cover the entire EV charging station installation cost for qualified affordable housing developments on all islands, making clean transportation more accessible to working class families. However, our affordable housing EV charging station incentive will only be available through June 30, 2022 or until funding runs out, whichever comes first. Seeing that Bill 25 FD1 includes a four-year grace period from this ordinance, it is even more critical that new affordable housing developments be required to have EV-ready parking stalls.

Substantial Benefits to Taxpayers from the Fully Implemented Code

The Blue Planet Foundation, based on data provided by the Hawai'i State Energy Office, estimates that over the next 20 years, O'ahu will save over \$971,000,000 through the implementation of the 2015 code and the amendments in the subject Bill. This is money that can stay in the local economy rather than being used for fossil energy or imported renewable infrastructure.

The sensible energy code amendments in the proposed Building Energy Conservation Code of the City and County of Honolulu, represent a critical opportunity for O'ahu to make a leap forward in the transition to 100% clean energy and will provide lasting economic benefits to residents and businesses who are already burdened with high costs. We encourage the Committee to pass the adoption of these provisions.

Thank you for the opportunity to testify. If you have any questions on Hawai'i Energy's programs or our work toward the adoption of stronger energy codes, please do not hesitate to contact me.

Sincerely,

Brian Kealoha
Executive Director

Speaker Registration/Testimony

Name Laurel
 Phone 8082847457
 Email laurelnakanishi@gmail.com
 Meeting Date 03-18-2020
 Council/PH Committee Zoning
 Agenda Item Bill 25
 Your position on the matter Support
 Representing Self
 Organization
 Do you wish to speak at the hearing? No

Dear Members of the Council,

My family and I recently pooled our resources to buy an electric vehicle. We believe in Hawai'i's plan to become fossil fuel-free and are trying to do our part to help achieve this goal. Because we already have PV and a garage, it is easy for us to charge, but that is not the case for many of my friends. I urge you to make EV charging easier and more equitable for all residents of Oahu by supporting Bill 25.

Written
Testimony

I have been saddened to hear about the numerous concessions made to the building industry throughout this long process, especially the points-based electric vehicle readiness compliance path, which sidesteps the EV readiness Oahu really needs. I would love to see a major building code revision that could combat the Climate Crisis. But FD1 brings a welcome improvement to the EV-ready requirements in the bill and I am in strong support of it.

Please pass Bill 25 (2019), CD2, FD1 today. And please work on more such legislation that takes real, concrete steps to confront climate change and further environmental justice.

Thank you for your time, attention and kokua,
Laurel

Testimony
Attachment

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and Agreement 1

IP: 192.168.200.67



**Hawaiian
Electric**

TESTIMONY BEFORE THE HONOLULU CITY COUNCIL

Written Testimony Only

**Comments in Support of
Bill 25 (2019), CD2
Relating to the Adoption of the State Energy Conservation Code**

Wednesday, March 18, 2020
10:00 a.m., Agenda Item #14
City Council Chamber

Dear Chair Anderson, Vice Chair Kobayashi, and Councilmembers,

Hawaiian Electric Company, Inc. (Hawaiian Electric) is **writing in support of Bill 25 (2019), CD2, Relating to the Adoption of the State Energy Conservation Code with some suggested amendments.** Bill 25 (2019), CD2 are proposing to regulate the design and construction of residential and commercial buildings for the effective use of energy. Two areas of the bill that Hawaiian Electric has focused on include solar photovoltaic (PV) readiness for single family homes, and electric vehicle (EV) infrastructure for homes and commercial spaces.

Over the past several months, Hawaiian Electric has worked with numerous stakeholders and participated in several meetings in an effort to bridge various viewpoints and move towards a solution that all parties could agree upon.

First, with regard to the PV readiness proposal, Hawaiian Electric believes PV readiness can serve as a catalyst to renewable generation and can contribute to the City's renewable goals. Thus, Hawaiian Electric supports a PV-ready requirement for new single-family and two-family detached residential development, and new duplexes but not for all new residential development. Furthermore, with the amendments made to CD2, Hawaiian Electric also supports the limited requirements proposed for new, multi-family developments.

Second, for Bill 25 (2019), CD2 Hawaiian Electric has focused on electric vehicle infrastructure for homes and commercial spaces. Bill 25 (2019), CD2 has the potential to make a big impact on the availability of EV charging infrastructure, particularly in areas of high population density. These areas are typically ideal locations for EVs in that residents tend to have shorter driving distances than those living in less dense, but more distant

locations from the city center. Existing commercial locations and multi-family buildings face expensive retrofits to their parking facilities to be EV ready, with individual tenants facing a potentially long and onerous process to gain association or board approval to retrofit individual stalls. However, by making a proactive requirement to plan for and incorporate EV charging into future large building projects, the costs will be lower.

Hawaiian Electric supports flexible and creative options for builders and developers when designing their facilities to meet the Bill's objectives, while managing the costs associated with doing so. As a result, during discussions, Hawaiian Electric proposed to utilize a point system that would provide greater flexibility when designing new facilities. Hawaiian Electric has worked with multiple stakeholders on the proposed point system, which seeks to provide qualifying points that would count towards compliance depending on the proposed infrastructure solution. This approach creates a more flexible approach for developers to design their projects. For residential developers, the point system serves to incentivize higher capacity charging installations in common areas, thereby serving a greater number of vehicles in a more efficient manner. Another important component of the point system was to grant even greater flexibility by allowing for lower amperage options for Level 2 charging stations at 16 amps. 16 amp service can help mitigate supporting infrastructure needs in certain circumstances, such as conduit and transformer size, and manage other associated costs while providing approximately 12 miles of additional driving range for each hour charged.

In light of the inclusion of 16 amp charging in the points table in CD2, the Company suggests that the table be amended such that the option for 16 amps not be limited to enclosed attached garages, but available as an option for all development modes. In addition, the Company suggests that the point system be amended to reflect 16 amps as the baseline value of 1 point, and therefore recognize the increased value of 32 amp service by doubling the associated values for this service, and a similar doubling of points for the 64 to 80 amp service.

In support of clean energy goals, both state and county policy mandate a transition away from imported fossil fuel in favor of alternative fuel, such as electricity, for ground transportation. All county Mayors have agreed to support a 100% clean transportation future, which implicates the need to begin providing charging infrastructure now to support future demand. Hawaiian Electric supports the growing need for EV charging infrastructure, and it

is increasingly evident that new building developments built today without EV charging capability will likely require retrofitting in the future. Proactive planning, such as deploying EV charging capability today will help to mitigate and otherwise avoid increased future expenses. While, it is true that vehicle charging infrastructure increases costs for developers, retrofitting for the same needs can cost several times more in the future. In addition, leveraging common area charging at new residential developments allows such costs to be shared amongst tenants, as opposed to placing the burden upon individual tenants.

The fact is, EV readiness will become an expected part of modern housing and commercial development, in much the same way as electricity and indoor plumbing became an expected amenity in the past. Providing EV charging may present future financial opportunities, as building owners can choose how much they want to charge EV drivers for using their charging stations and can potentially generate revenue by charging for electricity or can offer free charging to attract new residents or customers. Including EV charging infrastructure will ultimately increase the value of a development over time and will show a commitment to future generations with clear foresight.¹

EVs are coming fast, the U.S. electric vehicle market is accelerating rapidly with nearly ten years of year-over-year sales growth.² The need for more EV charging stations on Oahu is tremendous. Hawaiian Electric's backbone study forecasts that we will need seven-times more than the currently available EV infrastructure by 2030 to support the demand. One of the easiest and least expensive ways to provide for this future need is to include them in new building construction. While some express concerns that housing and commercial spaces should not become the "gas station" for EV drivers, EVs function differently than a typical internal combustion ("gas") vehicle. Gas vehicles require fill ups that take several minutes, whereas EVs charge at a slower rate, therefore it makes sense to charge where people will be staying for longer periods, like their homes or work. EVs will require behavioral shifts from vehicle owners, energy providers, and facility owners. It will be beneficial for future homes and workplaces to be built with their customer's needs in mind.

Hawaiian Electric supports zero-emission vehicles such as electric vehicles and recognizes the importance and positive impact the City and County can play in demonstrating

¹ According to the U.S. Green Building Council, projects can earn LEED certification points by adding EV charging stations.

² https://www.eei.org/issuesandpolicy/electrictransportation/Documents/FINAL_EV_Sales_Update_April2019.pdf

leadership in this important market. The Companies have developed an EV strategy that acknowledges the need for more public charging in order for this nascent technology to truly proliferate. In fact, Hawaiian Electric has undertaken several efforts to support the adoption of electric vehicles, such as the development of a growing DC Fast Charger network, with over 17 locations across the Companies' service territory.

Providing increased access to EV charging at workplaces, commercial locations and multi-family buildings are all key priorities identified in the Companies' Electrification of Transportation Strategic Roadmap. This bill will continue the tremendous progress that the state has made towards a cleaner and more sustainable transportation future.

Accordingly, Hawaiian Electric supports Bill 25 (2019), CD2 and the point system as it relates to electric vehicle charging infrastructure as well as the language affecting PV readiness in homes. Thank you for this opportunity to testify.



March 17, 2020

The Honorable Ron Menor, Chair
The Honorable Tommy Waters, Vice Chair
Members of the Committee on Zoning Planning and Housing
City Council, City and County of Honolulu
Honolulu, Hawaii 96813-3077

RE: Bill 25 (2019), CD2, FD1 (Elefante) – RELATING TO THE ENERGY CODE

Aloha Chair Menor and Members of the Committee on Zoning, Planning and Housing,

Mahalo for the continued opportunity to submit testimony on behalf of D.R. Horton offering comments to the amendments proposed by the Office of Climate Change, Sustainability and Resiliency by way of Councilmember Elefante's proposed CD2, FD1 ("OCCSR's Proposed CD2, FD1").

D.R. Horton supports the approval of OCCSR's Proposed CD2, FD1.

Since the last hearing on February 27, 2020, D.R. Horton has continued collaborating with OCCSR regarding our remaining concern with Subsection C406.8 Electric vehicle infrastructure, specifically Table C406.8.2 EV Readiness Points-Based Compliance Values. Through continued discussion, learning and good faith negotiations, we have come to an agreement on the actual point values in Table C406.8.2. Table C406.8.2, as reflected in OCCSR's Proposed CD2, FD1 strikes a good balance between sustainability and much needed housing, thus meeting the collective goal we are all striving to achieve.

Mahalo for the collaborative approach you have established with Bill 25. Your time and consideration on approving OCCSR's Proposed CD2, FD1 are very much appreciated. Should you have any questions, please do not hesitate to contact me at #782-4109 or ttonaki@drhorton.com.

Sincerely,

A handwritten signature in black ink, appearing to be "T. Tonaki".

Tracy Tonaki
Senior Vice President



March 17, 2020

The Honorable Ikaika Anderson, Chair
The Honorable Ann Kobayshi, Vice Chair
Members of the City Council, City and County of Honolulu
Honolulu, Hawaii 96813-3077

RE: Bill 25 (2019) CD2 (FD1)- Relating to the Adoption of the State Energy Conservation Code

Aloha Chair Anderson, Vice-Chair Kobayashi and members of the Council,

Thank you for the opportunity to submit testimony on behalf of Hawaii Gas in support of the proposed Bill 25 FD1 submitted by Councilmember Elefante. For water heating, the proposed amendments contained in both CD2 and FD1 (Elefante) brings the City and County of Honolulu into alignment with the state solar water heater mandate to allow variances under certain, specific circumstances. Additionally, the FD1 reflects the need for flexibility in EV charging requirements in a revised table of values.

Our company is committed to doing our part to reduce the effects of climate change on our state and the planet, and we are making great strides. We already produce clean, renewable, affordable and reliable energy, including solar. Hawaii Gas currently generates Renewable Natural Gas (RNG) at the Honouliuli Wastewater Treatment Plant, as well as hydrogen at our Synthetic Natural Gas (SNG) facility in Campbell Industrial Park. We are turning your waste into a renewable gas resource, which is being used to power the very efficient, affordable, on-demand gas water heaters. It is also important to note Hawaii Gas has the LOWEST carbon footprint of any energy utility in the state.

Hawaii Gas still has deep concerns about the lack of full exemptions for affordable, workforce housing in both the CD2 and FD1. These projects need to remain financially viable, and move forward to address our dire housing crisis. Without additional exemptions, it will be much more difficult for these projects to do so. However, we understand that these issues will continue to be addressed and discussed soon, and our hope is a more equitable solution will be found.

Mahalo for the opportunity to testify.

From: CLK Council Info
Sent: Tuesday, March 17, 2020 1:48 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Mark Hixon
Phone 8089566427
Email hixonm@hawaii.edu
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 (2019), CD2, Proposed FD1
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written
Testimony

Aloha-- I urge the full Council to pass Bill 25 with Councilmember Elefante's FD1 (Floor Draft #1). The bill has been far too diluted through time. The simple truth is that, for Hawai'i to go fossil-fuel free by 2045, EVs must be encouraged as much as possible, including easily accessible home charging stations. It is FAR less expensive to install such stations during initial construction. Mahalo for your consideration.

Testimony
Attachment

Accept Terms and Agreement 1

IP: 192.168.200.67

From: CLK Council Info
Sent: Tuesday, March 17, 2020 12:26 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name Kerstyn Tamiko Afuso
Phone 8083755484
Email ktafuso@gmail.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 FD1 Elefante
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written
Testimony

Bill 25 is so important to Hawaii's ambitious clean energy goals of 2045. Not only will it support our island's well-being, but it will also support our resident's well-being. With the rate that climate change is happening, this bill would be a great step in trying to reduce our impact on the planet and using the abundant source of natural and renewable energy that we have almost everyday! The sun! The ability to charge EVs at home from solar powered charging stations would change the game and make EVs even more accessible and commonsense in Hawaii. Along with solar powered water heating, this could reduce the amount of money Hawaii residents pay for utilities and even gas. We need to utilize Hawaii's natural tropical climate, and implement these changes NOW rather than later. We are already behind on our clean energy goals for Hawaii.

Testimony
Attachment

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IP: 192.168.200.67



HONOLULU CITY COUNCIL
TESTIMONY IN SUPPORT OF BILL 25, FD1 (2019) RELATING TO THE ADOPTION OF THE
STATE ENERGY CONSERVATION CODE

March 18, 2020, 10:00 a.m.
Honolulu Hale

Chair Anderson and Members of the Council:

Earthjustice **supports** passage of Bill 25, Floor Draft 1 ("Bill 25, FD1"), which provides greater energy independence and clean energy options to Honolulu residents by mandating EV charging capacity in residential and commercial buildings, providing more roof top capacity for solar installation, and giving builders the option to use super-efficient tropical building standards. It only through such forward-looking policies that Hawai'i will be able to meet its statewide clean energy goals, and make affordable renewable energy available to all.

Earthjustice has been involved in advancing clean energy initiatives in Hawai'i and across the nation for over a decade. Widespread EV charging capacity is critical to ensure that consumers are able to take advantage of the long-term cost-savings associated with ownership of an electrical vehicle, and associated reductions in individual greenhouse gas emissions. The compromise position outlined in Bill 25, FD1 is an important first step towards making EV charging capacity widely available in our community. If any further amendments are made to Bill 25 they must be to *increase* EV charging availability, particularly in affordable housing developments, where residents are most in need of cost-effective transportation options.

In general, clean energy technologies not only reduce greenhouse gas emissions, but can also reduce monthly cost of living expenses associated with heating and cooling our homes and offices, and powering our transportation system, with expensive fossil fuels. This is especially true here in Hawai'i, where our abundant natural resources provide ready alternatives to traditional power sources. However, government action is important to making sure we are able to collectively harness our alternative energy options, by ensuring good energy decisions at the time of construction, when installation costs are lowest. Because Bill 25, FD 1 advances this clean energy vision for our community, we respectfully ask that the Council adopt this bill.

Thank you for the opportunity to submit testimony in support of Bill 25, FD 1.

Sincerely,

Leinā'ala L. Ley
Attorney, Earthjustice

From: CLK Council Info
Sent: Tuesday, March 17, 2020 3:51 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name B.A. McClintock
Phone 8080000000
Email redahi@hawaii.rr.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No

Written
Testimony

I support Bill 25 FD1 as an actionable step toward a clean energy future. Construction on new homes and other buildings will be cleaner, healthier, and more affordable to operate. Hawai'i has an affordability and cost of living crisis, the slight increase in new construction costs more than pays for itself through utility bill savings, and in the case of EV-readiness, through avoided gasoline purchases. With that, I humbly suggest taking out the EV parking point system which is complicated and will result in less stalls for people to use. A more balanced approach would be to phase in EV-ready parking requirements so that it is available to everyone. Bill 25 FD1 is needed to turn the tide on the impacts of climate change we are already experiencing, please consider amending to make this a bold step forward.

Mahalo for the opportunity to support Bill 25 FD1.

Testimony
Attachment
Accept Terms and Agreement 1

IP: 192.168.200.67



March 17, 2020

City and County Council
Wednesday, March 18, 2020, 10:00am

**Bill 25, Proposed FD 1 – RELATING TO ADOPTION OF THE STATE ENERGY
CONSERVATION CODE**

Aloha Councilmembers:

I am submitting testimony on behalf of Hawaiian Community Assets (HCA), the State's largest Department of Housing and Urban Development (HUD) approved housing counseling agency and its Department of Treasury certified nonprofit Community Development Financial Institution (CDFI), Hawaii Community Lending, to **SUPPORT Bill 25, proposed FD 1.**

Bill 25, FD 1 would regulate the design and construction of residential and commercial buildings for the effective use of energy through the adoption of the State Energy Conservation Code.

Our organizations deem action on energy conservation to be critical to the long-term well-being of our island communities. At the same time, housing affordability is necessary to allow our local families to remain rooted in Hawaii.

We believe Bill 25, FD 1 achieves this balance by providing a 4-year grace period for implementation of electric-vehicle parking requirements on nonprofit affordable housing developers building for low-income households up to 100% area median income and thereafter, reducing said requirements.

Furthermore, to ensure greater cost savings on nonprofit builders and affordability for our low-income households, we recommend the Council also pass Bill 2 to reform parking requirements all together.

Mahalo for your time, leadership and consideration. Please contact me directly at 808.587.7653 or jeff@hawaiiancommunity.net should you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink that reads "Jeff Gilbreath". The signature is written in a cursive, flowing style.

Jeff Gilbreath
Director of Lending and Development

From: CLK Council Info
Sent: Tuesday, March 17, 2020 5:25 PM
Subject: Council/Public Hearing Speaker Registration/Testimony

Speaker Registration/Testimony

Name PHYLLIS FONG
Phone 8083581851
Email Phylfong@yahoo.com
Meeting Date 03-18-2020
Council/PH Committee Council
Agenda Item Bill 25 (2019), CD2, Proposed FD1
Your position on the matter Support
Representing Self
Organization
Do you wish to speak at the hearing? No
Written Testimony
Testimony Attachment
Accept Terms and Agreement 1

IP: 192.168.200.67



CITY COUNCIL
City and County of Honolulu
March 18, 2020, 10:00 A.M.
(Testimony is 11 pages long)

TESTIMONY IN SUPPORT OF BILL 25 (2019) CD2, WITH SUGGESTED AMENDMENTS
Relating to the adoption of the State Energy Conservation Code

Chair Anderson, Vice Chair Kobayashi, and Members of the City Council:

Blue Planet Foundation supports Bill 25 (2019) CD2, a measure to modernize the City & County of Honolulu's (Honolulu's) building energy code. We are disappointed, however, that the current and proposed (FD1) fall well short of what is needed to address our climate challenge and ensure long-term affordability for all Honolulu residents.

The proposed bill adopts a revised version of the Hawai'i Energy Code for Honolulu to increase occupant health and comfort and reduce energy use. The proposed code revision reflects broad changes in technology, building materials, and best practices, while considering Honolulu's unique island and building environment.

We understand, however, that the updated Hawai'i Energy Code is already in effect for Honolulu pursuant to HRS §107-28. Nonetheless, Bill 25 CD2 would codify these changes, albeit with some amendments that result in a loss of savings and increased carbon emissions as compared with the current Hawai'i Energy Code. It does contain some improvements, however—hence our support.

Blue Planet is disappointed that the CD2 version of Bill 25 weakens many of the original energy efficiency and clean mobility provisions in the original draft of the measure. We do not support the following amendments in the CD2:

1. Establishing an alternative "points" system for compliance with the 25% EV charger readiness requirements;
2. Reducing the EV charger readiness requirements for retail establishments;
3. Reducing the EV charger readiness requirements for housing units in the 80 percent to 140 percent of the area median income for Honolulu;
4. Exempting production homes from the requirement that a ceiling fan or whole house fan is provided for bedrooms and the largest space that is not used as bedroom; and
5. Eliminating the specific county requirement for a solar water heater, heat pump, or smart water heater in new single-family homes.

We fear the proposed amendments in the proposed CD2 will result in a loss of energy savings for Hawai'i residents while missing opportunities to reduce our island's carbon emissions.

Further, Blue Planet has reviewed FD1 version proposed by councilmember Elefante. We **support** the amendment to ensure that at least 10% of new parking stalls comply with the EV charger ready standard (or “points system” equivalent) for affordable housing developments at or below 100 percent of the area median income.

We **do not**, however, support the amendment in the proposed FD1 which further weakens the EV charger ready requirement by revising the “points system” to allow for compliance with fewer EV chargers and EV ready stalls than the CD2 draft.

In this testimony we will explain some of these key changes, show how the CD2 compares with the original draft of Bill 25 along a spectrum of options, and offer proposed amendments to increase energy savings and help “future-proof” new buildings to ensure the lowest-cost transition to clean mobility.

Basis for Blue Planet Foundation's position

Blue Planet Foundation is a Hawai'i-based nonprofit organization. We work to clear the path for local, clean, renewable power. Through our advocacy for clean energy adoption, we seek to make our communities stronger, our energy more secure, our environment healthier, and our economy more robust. We appreciate Honolulu's growing leadership on clean energy issues.

Over the course of the past ten months of conversation on Bill 25, three things have shifted that shape our thinking on this proposal:

1. **The climate crisis has grown.** Over the past half year we have increasingly experienced the consequences of climate change—a direct result of our continued use of fossil fuels. Australia has experienced devastating fires earlier this year, killing upwards of 1.5 billion animals and causing immeasurable damage. Hawai'i tied or broke over 270 high temperatures in 2019, and the waters surrounding the islands experienced record high temperatures. We are running out of time to aggressively act to reduce fossil fuel use globally.
2. **Fossil natural gas is being banned throughout the country.** An increasing number of cities across the country are banning natural gas for new buildings because of its threat to climate and health. Berkeley, California, was the first, followed in the state by San Jose, Mountain View, Santa Rosa and Brisbane. On the East Coast, Brookline, Massachusetts, last November became the first city in the state to ban new gas hookups. Dozens of other cities, from Cambridge and Newton in Massachusetts to Seattle, are considering similar bans. On the mainland, natural gas is now responsible for more climate-heating emissions than coal is. Globally, fossil gas is the fastest-

growing source of climate change emissions, according to study published in Environmental Research Letters in December 2019.¹

3. **The upcoming version of the international building energy code calls for 20% EV ready parking.** The International Code Council (the organization which develops the model code for cities and states to adopt) recently approved the inclusion of EV charger ready requirements in their 2021 building energy code.² This new provision by the fairly conservative International Code Council acknowledges the growing recognition that the future of transportation is electric, and substantially cost savings can be realized by preparing for EV chargers while buildings are under construction.

The Council has an opportunity to adopt a modernized building energy code for O'ahu that reflects our need to seriously address the climate crisis while ensuring long-term affordability for residents and businesses. An amended Bill 25, **as proposed in this testimony**, would do just that.

Energy efficiency is foundational for affordability & climate security

Energy efficiency is the most cost-effective energy resource available in the state, costing a fraction of fossil fuel-powered electricity.³ The anticipated energy savings arising from the 2015 IECC (International Energy Conservation Code) were tabulated in a May 2016 Report prepared for the Department of Business, Economic Development & Tourism ("DBEDT").⁴ When translated into dollars, the billions in savings plainly illustrate the enormous benefit of the proposed amendments.

Statewide Savings	2016	2026	2030	2036
MWh	12,962	1,083,590	1,991,059	4,702,738
\$	\$4,000,000	\$337,000,000	\$619,000,000	\$1,463,000,000

(Note: energy cost savings calculated here utilize the average retail cost of electricity over the period 2011 – 2016.⁵)

¹ R B Jackson, et al. 2019. Environmental Research Letters. 14, 121001

² See <https://qz.com/1781774/new-us-building-codes-require-plugs-for-electric-cars/>

³ Energy savings delivered by the state's Hawai'i Energy program in 2016 cost 2.06 cents per kWh. See *Hawaii Energy 2014 Annual Report*, available at https://hawaiienergy.com/images/resources/ProgramYear2016_AnnualReport.pdf. Even with today's relatively low oil prices, electricity from oil-fired power plants costs around seven times more. See *DBEDT Monthly Energy Trends*, available at <http://dbedt.hawaii.gov/economic/energy-trends-2/>.

⁴ See The Cadmus Group, Inc., *Energy Savings Forecast for the 2015 Int'l Energy Cons. Code with Haw. Amendments* (prep'd for DBEDT, May 2016), available at <https://energy.hawaii.gov/wp-content/uploads/2016/07/Energy-Savings-Forecast.pdf>.

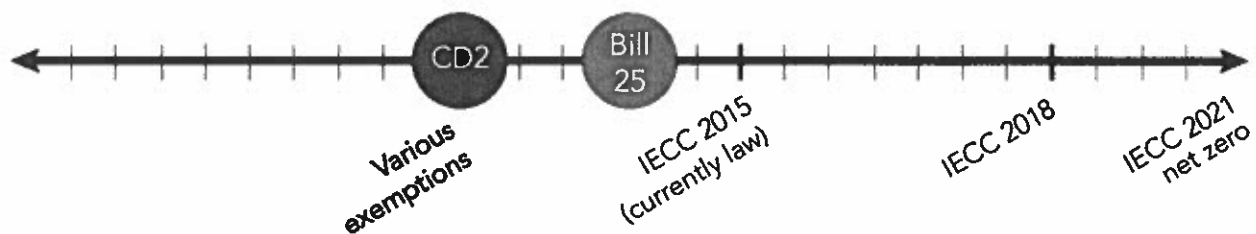
⁵ See DBEDT Monthly Energy Trends.

Extrapolating the savings for O‘ahu based on the percentage of energy used on the island versus statewide energy use, **the estimated 20-year savings for O‘ahu is over \$971 million under the proposed building energy code revisions (approximately \$318 million in residential energy savings and \$653 million in commercial energy savings).**

The substantial savings resulting from reduced energy use dwarf the associated costs. In its February 2016 report, the Pacific Northwest National Laboratory stated: “The 2015 IECC provides cost-effective savings for residential buildings in Hawai‘i. Moving to the 2015 IECC from the 2006 IECC base code is cost-effective for residential buildings in all climate zones in Hawai‘i.”⁶ Moreover, we understand that this cost-effectiveness may be *even higher* for many residential buildings in Hawai‘i, where immediate cost savings can be obtained via lower construction costs *and* lower energy costs by utilizing the particularly important portions of the code applicable to the tropical zone. In such instances, the “payback” period would be immediate.

The original Bill 25 updated Hawai‘i’s 14-year-old building energy code with the International Energy Conservation Code’s (IECC) 2015 model code (which is now in effect for O‘ahu). Bill 25, however, relaxed some requirements in the IECC 2015 code regarding insulation and efficiency testing. Since the adoption of the IECC 2015 code at the state level in 2017, an updated code (IECC 2018)—with more stringent energy saving measures—has been released. What’s more, an even newer code (IECC 2021) code is currently being finalized. The Bill 25 CD2 version contains additional exemptions from the original proposal (including the elimination of ceiling fans for production builders), resulting in increased energy costs for homes and buildings.

The following shows roughly how the CD2 version compares with the original Bill 25, the existing law, and forthcoming building energy codes.



SUGGESTED AMENDMENT

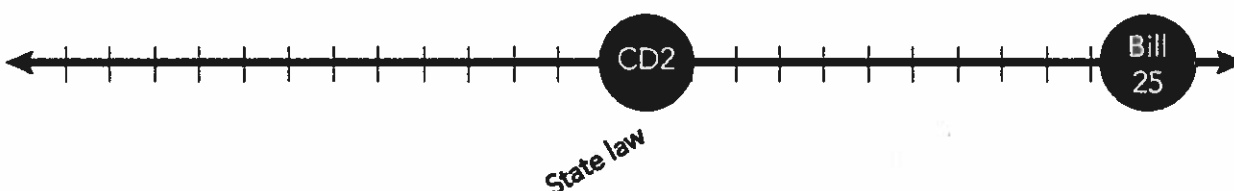
Blue Planet respectfully requests that the Council revert back to the original language in Bill 25 regarding building energy efficiency requirements, including the requirements for testing, insulation, and the inclusion of ceiling fans or whole house fans for production homes.

⁶ Pac. Northwest Nat'l Lab., *Cost-Effectiveness Analysis of the Residential Provisions of the 2015 IECC for Hawaii* (prep'd for the U.S. Dept. of Energy by, Feb. 2016), available at https://www.energycodes.gov/sites/default/files/documents/HawaiiResidentialCostEffectiveness_2015.pdf

All new homes should have solar or high efficiency water heaters

Solar water heating is recognized as an incredibly efficient—and cost-saving—strategy for most homes. Since 2010, the state has required solar water heating in almost all new homes. But this law has a variance process for rare exceptions where solar just doesn't work. Unfortunately, this variance has been abused by developers, despite the legislature's clear intent that variances "will be rarely, if ever, exercised or granted." Consequently, nearly half of new homes proposed or being built today on O'ahu include fossil-fuel gas water heaters. Thousands of homes on the hot Ewa Plain of O'ahu are slated to be built with gas water heaters, locking future homeowners into higher energy costs over years of home ownership. Instead of being part of our clean energy future, these homes will contribute to climate change for decades into the future.

The original Bill 25 ensured that all new homes came equipped with solar water heaters (or another renewable source), or—if a renewable source wasn't cost effective—a water heater that works as a heat pump, a "smart" grid-interactive water heater, or a water heater that uses at least 90% renewable gas. ***This requirement was removed in the CD2 version of the measure.***



SUGGESTED AMENDMENT

Blue Planet supports the original language in Bill 25 regarding water heaters for new single-family homes. That language states if a solar- or renewable-powered water heater does not make sense economically—based upon a lifecycle cost-benefit analysis that incorporates the average residential utility bill and the cost of the new solar water heater system with a lifecycle that does not exceed fifteen years—then one of the following technologies advancing clean energy may be used instead:

Heat pump water heater. A heat pump uses electricity to move heat from one place to another (like a refrigerator operating in reverse) rather than generating its own heat like a traditional electric water heater. This makes heat pumps two to three times more efficient, according to the Department of Energy (DOE). Heat pumps can also work to help cool homes. According to the DOE, a heat pump water heater can save an O'ahu household of four people nearly \$1,000 per year on their electric bill.

Grid-interactive water heater (GIWH). A GIWH is a smart water heater that uses intelligent controls that are capable of interacting with and participating in utility load control or demand response programs. This allows the water heater to be an asset on the utility grid by smoothing out electricity usage and increasing the use of variable

renewable energy. A local company, Shifted Energy, has already deployed hundreds of GIWH systems across O'ahu.

Renewable gas water heater. A renewable gas water heater would heat water using no less than 90% renewable gas fuel. This could be natural gas or methane produced from renewable sources (such as biomass or methane from wastewater treatment plants or landfills), or hydrogen gas developed from renewable sources.

This amendment to the proposed building energy code update provides flexibility to developers while ensuring that future homes will be built with high-efficiency or renewable water heaters.

Preparing for inevitable electric mobility is cheaper now than later

Blue Planet Foundation strongly supported the original “EV-ready” requirement for new commercial and multi-family residential construction in Bill 25. This is an important first step to lowering the overall cost of our transition to electrified transportation and make electric vehicles more accessible to O'ahu residents.

Electric vehicles (EV) are the fastest growing segment of new cars in Hawai'i. Over roughly the past year (January 2019 – January 2020), EV registrations on O'ahu increased by 31%, while registrations of gasoline-powered vehicles grew only 1 percent.⁷ We expect the number of registered EVs to grow substantially as new EV models with longer ranges and lower prices hit the market.

Electric vehicles will play an integral role in Hawai'i's clean energy future. While EVs that use the existing electricity grid to charge still use mostly fossil fuel, they use that fuel more effectively than burning fuel directly in a typical gasoline engine. This is why EVs are much less expensive to “fuel” per mile than their gasoline counterparts. Further, by using stored electrical energy, EVs can take advantage of intermittent solar, wind, and other clean energy resources. Most vehicles sit idle over 22 hours of the day, so they can become *de facto* energy storage devices if their batteries are plugged into the grid when they are not in use. With smart grid infrastructure in place, EVs become an essential component to electricity load and clean energy resource balancing—in addition to providing clean mobility solutions for Hawai'i residents.

Still, over 600,000 gasoline-powered vehicles are on O'ahu's roads—and from them comes nearly five million metric tons of climate-changing carbon pollution. What's worse, while O'ahu has made decent progress in reducing its carbon emissions from the electricity sector, emissions from ground transportation have been increasing in recent years.

⁷ DBEDT Monthly Energy Trends, February 2020 (<http://dbedt.hawaii.gov/economic/energy-trends-2/>).

The International Energy Agency has found that “the availability of chargers emerged as one of the key factors for contributing to the market penetration of EVs.”⁸ Unlike gasoline car owners, charging behavior for EV owners indicates that more than 80% of EV drivers charge their cars at home or at work.⁹ In addition, a large share of the Honolulu’s population lives in high density, multi-family residential buildings. The vast majority of parking facilities currently lack EV chargers. By ensuring that we are “future-proofing” new construction projects, this measure could be a critical step toward increasing electric vehicle charging options for those who don’t have access to charging at home or at work.

Honolulu can expect more residents to choose EVs over gasoline vehicles as prices decrease. Battery costs have fallen precipitously over the past several years so that in many cases, the total cost of ownership for EVs is lower than for gasoline vehicles. Experts expect battery prices to continue to fall and as automakers increase the number of models and volume of EVs in the next few years, the upfront cost of EVs is expected to reach upfront cost parity with gasoline vehicles by 2024.¹⁰ In part due to falling costs and increasing consumer demand, and in part due to government policies supporting EVs, nearly all of the world’s leading automakers have announced aggressive strategies and investments in EVs during the past two years.

The most challenging aspect of EV charger installation is the common lack of electrical capacity and distributed subpanels to support broad deployment of charging infrastructure. **By choosing not to install the wiring and conduit upfront in new construction, developers are forcing tenants to pay for expensive retrofit costs to upgrade power capacity and wiring to their parking stalls.**

Studies have shown that **installing EV infrastructure at the time of construction can be 91% less expensive than post-construction retrofits**, and per stall installation costs can be reduced through economies of scale.¹¹ Vancouver, BC, found that the average cost of adding charging infrastructure during construction was as low as \$300 (CAD) per stall compared to an estimated \$3,300 for a later retrofit.

EV charger ready requirements don’t require the installation of the actual EV charging infrastructure, they simply require that the power capacity and conduit be set up during construction, which dramatically reduces retrofit costs at the time of charger installation, creating cost savings downstream for residents and tenants.

Cities around North America are adopting EV-ready requirements for commercial and residential new construction. Seattle, San Jose, Atlanta, San Francisco, and Oakland have adopted requirements for a certain percentage of stalls to be ready for Level 2 charging. Vancouver, British Columbia, now requires that 100% of new parking stalls be built ready for EV

⁸ *Global EV Outlook 2017*, <https://www.iea.org/publications/freepublications/publication/GlobalEVOutlook2017.pdf>.

⁹ *Id.*

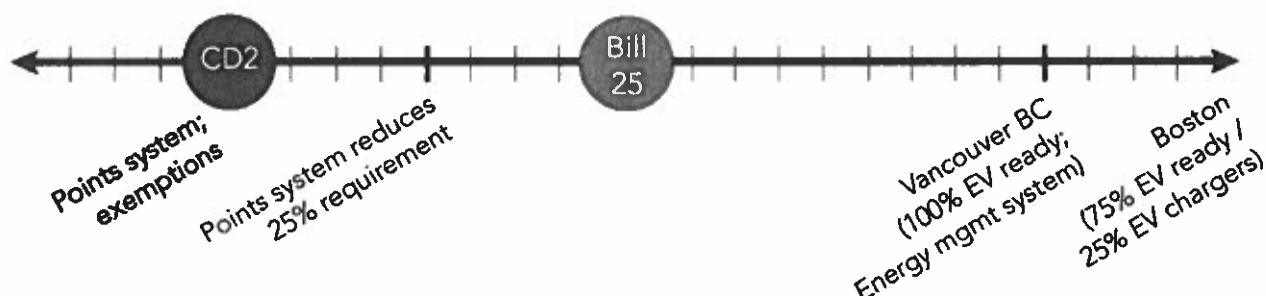
¹⁰ See Bloomberg New Energy Finance, <https://bnef.turtl.co/story/evo2018>.

¹¹ See <http://evchargingpros.com/wp-content/uploads/2017/04/City-of-SF-PEV-Infrastructure-Cost-Effectiveness-Report-2016.pdf>.

chargers. Honolulu—with the second highest adoption of EVs per capita nationwide—should implement a similar policy.

Electric vehicles are better for the environment and the economy and can help O’ahu reach its renewable energy and transportation goals. The time has come when Honolulu residents want to purchase electric vehicles but need convenient and affordable charging options. An EV-ready requirement will ensure that the EV charging infrastructure network necessary to support the influx of electric vehicles can be installed more efficiently and cost-effectively in new construction projects. It will provide new EV owners—particularly those that will live in new multi-family residential buildings—with the confidence that they will be able to access charging at home, at the workplace, and in public spaces.

The original Bill 25 set a standard for electric vehicle (EV) charger ready provisions (electrical panel capacity and wiring conduit) for 25% of new parking spaces in commercial, multi-family, and residential construction above a certain number of parking spaces. This was a modest proposal for new construction—cities across the nation are requiring an increasing percentage of EV charger ready parking. The city of Boston requires that 100% of new parking in certain areas be EV ready, with 25% of stalls having charging equipment already installed. Vancouver, BC, requires that 100% of stalls be wired for EV chargers, while allowing for an energy management system to control the overall electricity demand (and therefore reduce the upfront electrical capacity investment).



The CD2 creates an alternative “points system” whereby developers can reduce the number of EV ready stalls in any single development by installing EV ready equipment or chargers in common areas, or increasing the number of EV ready stalls or chargers in other projects. This approach will undoubtedly create complex enforcement issues across development projects and phases. Further, by allowing double and triple points for EV readiness or chargers in common areas, the management of charging will become incredibly difficult. Will residents be allowed to occupy all of the “visitor” parking to charge? Because of the challenges common area charging presents, Vancouver exempted visitor stalls from their 100% EV ready requirement. This “points system” sets an unusual precedent—no other state or city takes such a convoluted approach.

The FD1 version of Bill 25 reduces the EV charger requirements even further by allowing additional points for installing chargers or EV charger ready infrastructure in visitor stalls. By providing 50 points for DC fast charger, a developer can simply install a single charger per 200 parking stalls (instead of electrifying 50 parking stalls under the 25% requirement). Compare this outcome with a new building in Vancouver, where all of the stalls will be EV charger ready, enabling managed charging across a fleet of cars for the benefit of the vehicle owners—and potentially all electricity customers by providing a controllable, flexible load to the utility.

The IECC 2021 model code includes a 20% EV charger ready requirement (at Level 2, 240V/40A) for new commercial and residential construction. This new provision by the fairly conservative International Code Council acknowledges the growing recognition that the future of transportation is electric, there is value in having a fleet of vehicles plugged in to the electricity grid, and substantial cost savings can be realized by preparing for EV chargers while buildings are under construction. The CD2 also reduces the EV ready requirement to 16 amps instead of 32 amps for townhome and single-family dwellings—a deviation from the standard 40-amp requirement for Level 2 charging (even a clothes dryer is typically at 30 amps).

Finally, the CD2 exempts all “affordable” projects below the 100% Area Median Income from EV charger ready requirements. This only increases the future costs of residents in the low- to moderate income range when they adopt low-cost EVs in the future. The FD1 requires 10% of stalls comply.

SUGGESTED AMENDMENTS

Blue Planet Foundation respectfully requests that Councilmembers consider two amendments to strengthen Bill 25 CD2 to better “future-proof” new multi-family homes and buildings in preparation for low-cost electric vehicle proliferation.

1. Blue Planet believes that Bill 25 should require that 100% of new parking stalls be EV charger ready, with a provision to allow an energy management system, similar to Vancouver, BC.
2. Second, Bill 25 should be amended to require 40A instead of 16A for the Level 2 EV charger ready requirements for enclosed attached garages. The Level 2 standard globally is 240V/40A.

With the rapid rate of change in the adoption of EVs, we expect that most new cars sold in Hawai'i will be electric or hybrid within a decade. Further, requiring a lower percentage (or using a “points system”) creates uncertainty about how the limited EV charger ready stalls will be allocated to future homeowners, tenants, or renters Will those who would like to install an EV charger be able to access the one-in-four stalls that are EV-ready? This measure should reflect and anticipate the future where nearly all vehicles are zero emissions. This is particularly important given the slow of pace of updating Honolulu's building energy code. Failure to do so will lead to unnecessary expense in retrofitting relatively recent buildings with what will soon be commonplace amenities.

This is also an issue of equity. It's likely that the initial group of individuals purchasing EVs will be more affluent than latter adopters—this holds true for many innovations, as they are initially more expensive. They will be positioned to take advantage of the 25% (or however many) of stalls that are EV-ready. But what about later adopters who are less affluent? Any policy requiring less than 100% EV charger ready may have the effect of burdening these later EV adopters with the high costs of retrofitting to install EV infrastructure in already completed buildings. Simply requiring that all stalls are EV-ready avoids this potential inequity.

Requiring that all new parking stalls be EV-ready is not without precedent. Again, the city of Vancouver, BC, passed a law updating their four-year-old EV-ready requirement from 20% of new residential stalls to 100% of new stalls.¹² The law took effect January 1, 2019. Since 2014, existing requirements have resulted in 20,000 electric vehicle-ready stalls in buildings.¹³ Other cities are considering similar 100% EV-ready policies.

To accomplish this, Blue Planet Foundation requests that the proposed language in Bill 25 CD2 relating to Subsection C406.8 should be modified as follows (underlined indicates additions, ~~strikethrough~~ indicates deletions):

C406.8 Electric vehicle infrastructure. All parking stalls in n~~New residential multi-unit buildings that have eight or more parking stalls, and new commercial buildings that have twelve or more parking stalls,~~ shall be electric vehicle charger ready ~~for at least 25 percent of the parking stalls.~~ As used in this section, "electric vehicle charger ready" means that sufficient wire, conduit, electrical panel service capacity, overcurrent protection devices and suitable termination points are provided to connect to a charging station capable of providing simultaneously an AC Level 4 2 charge per ~~required~~ parking stall ~~for residential and multi-unit buildings. For commercial buildings, at least 25 percent of the parking stalls are required to be AC Level 2 charger ready.~~ Charge method electrical ratings are provided below:

CHARGE METHODS ELECTRICAL RATING

Charge Method	Normal Supply Voltage (Volts)	Maximum Current (Amps – Continuous)	Supply Power
AC Level 1	120V AC, 1-Phase <u>120V AC, 1-Phase</u>	12A <u>16A</u>	120VAC/20A <u>(12-16A continuous)</u>
AC Level 2	208 to 240V AC, 1-Phase	≤32-80A	208/240VAC/20-100A (16 32-80A continuous)

¹² See <https://vancouver.ca/streets-transportation/electric-vehicles.aspx>

¹³ See <https://www.vancourier.com/news/city-council-boosts-electric-vehicle-infrastructure-1.23202750>

Blue Planet Foundation welcomes the opportunity to work with the Council on identifying ways to make this EV-ready policy more acceptable to all stakeholders. Potential approaches to decreasing the potential burden of this proposed EV-ready policy (as amended) include:

1. **Phase-in period.** Increase the required percentage of stalls in phases (i.e. 25% of new stalls starting January 1, 2020; 50% starting January 1, 2021; 75% starting January 1, 2022; 100% starting January 1, 2023).
2. **Limit requirement.** For multi-family buildings, visitor parking could be excluded (Vancouver does not require visitor parking to be EV-ready).
3. **Allow the use of EV Energy Management Systems (EV EMS).** Providing the capability for every parking stall to charge an EV at Level 2 may lead to unnecessary expense in developing the building's electrical capacity (transformer, circuit capacity, etc.). In reality, all cars charging at once is an unlikely scenario, but engineers would need to design for that extreme possibility. In order to minimize the impact on builders and the utility grid, Vancouver's requirements allow the use of an EV EMS. Because most personal vehicles are parked for 8 to 10 hours per day at home, an EV EMS allows multiple vehicles to share a circuit. This significantly reduces construction costs and utility costs. In Vancouver's law, an EV EMS must ensure that every EV charging outlet receive at least 12kWh over an 8-hour period. This means that, even if a vehicle is plugged into every single outlet at once, all EVs will receive enough energy for the next day (about 50 miles with today's EV technology, or about twice the average daily distance driven on O'ahu).

Blue Planet Foundation would be happy to provide draft language to the Council accomplish this and ensure that we have a smart EV-ready policy for new construction on O'ahu that maximizes the benefits of clean transportation and smart buildings for all.

Conclusion

Blue Planet sees strong alignment between our urgent needs to reduce our carbon emissions and increase the long-term affordability for all O'ahu residents. Bill 25 provides an opportunity to solidly address both. Unfortunately, the amendments made in both the CD2 and the FD1 versions of Bill 25 reduce this measure's effectiveness, resulting in a building code that will cause more energy waste than the original draft and require expensive retrofitting for EV charging infrastructure after buildings are complete.

We urge the Council to consider Blue Planet Foundation's proposed amendments to strengthen Honolulu's building energy code, for our families and for our future.

Mahalo for your consideration and this opportunity to provide testimony.